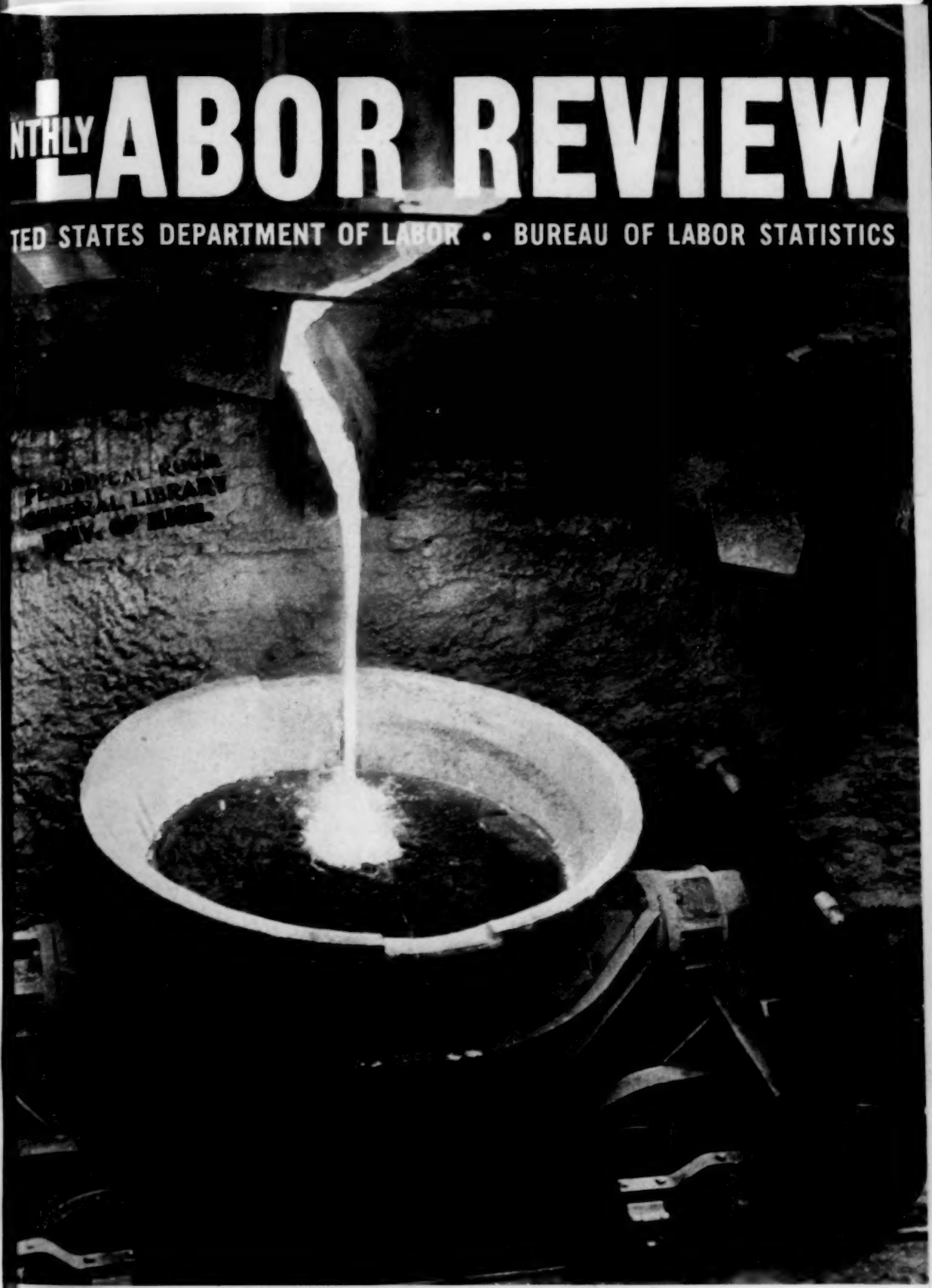
MONTHLY LABOR REVIEW

UNITED STATES DEPARTMENT OF LABOR • BUREAU OF LABOR STATISTICS



Tapping the Slag at a Blast Furnace

Photo by courtesy of Farm Security Administration

APRIL 1941
VOL. 52 • NO. 4

UNITED STATES DEPARTMENT OF LABOR

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Published by the Bureau of Labor Statistics, under authority of Public Resolution No. 57, approved May 11, 1922 (42 Stat. 541) as amended by section 307, Public Act 212, 72d Congress, approved June 30, 1932. For sale by the Superintendent of Documents, Washington, D. C. Price, 30 cents a copy. Subscription price per year in the United States, Canada, and Mexico, $3.50; other countries, $4.75. This publication approved by the Director, Bureau of the Budget.

MONTHLY LABOR REVIEW

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HUGH S. HANNA, EDITOR

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APRIL 1941 Vol. 52, No. 4

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FOR APRIL 1941

LIVING CONDITIONS OF WORKERS IN PUERTO RICO

By ALICE C. HANSON, *Bureau of Labor Statistics*

PUERTO RICO is a tropical island 100 miles long by 35 miles wide, located 1,150 miles northeast of the Panama Canal, 1,050 miles southeast of Miami, Fla., and 550 miles north of South America. It was under Spanish control from 1493 until 1898, when it became territory of the United States.

Its location has acquired new strategic importance with the acceleration of the national defense program. The Island is now the site of a rapidly developing naval air base designed to serve as an outpost for the protection of the Panama Canal and the southeast portions of the mainland.

Characteristics of the Island

Climate.—Though Puerto Rico is situated in the torrid zone, its climate is not extremely tropical. The mean annual temperature of 76.5° for the entire Island is slightly higher than the corresponding figure for Hawaii, but 4° lower than that for the Philippines. The range between average January and July temperatures is only 6°. Annual average temperatures for coastal stations range from 75 to 80°; those in the interior, at altitudes above 1,000 feet, from 68 to 74°.

Day temperatures on the coast, generally between 80 and 90°, are conducive to profuse perspiration with physical exertion. As the relative humidity throughout the 24 hours is generally above 75 percent, evaporation is rather slow unless the surrounding air is in motion. Consequently, locations protected from the prevailing breezes seem uncomfortably hot, while those open to the trade winds of this latitude are cool and pleasant. There are generally sea breezes by day and land breezes at night. As the interior of the Island is composed of mountains reaching elevations as high as 4,000 feet, the air drainage from high altitudes to the coasts results in refreshing night temperatures, especially during the winter months.

The principal difference between periods of the year lies in the rains, which descend in frequent sudden downpours during the sum-

mer and fall months. The winter rains are relatively much lighter. Puerto Rico is in the storm belt of the Caribbean region and has been visited from time to time by devastating hurricanes, the most severe of recent date being in 1928 and 1932. At such times, crops are ruined, animals killed, trees destroyed, huts and flimsily constructed buildings carried away or demolished, and great damage done to the buildings left standing.

Density of population.—In 1935 the total population was 1,700,000, and there were 507 inhabitants per square mile—a population denser than that of Java, Great Britain, Belgium, or the Netherlands. By 1940 the population had increased to almost 1,900,000 and the density to 544. Population increased 19 percent from 1920 to 1930 and 21 percent from 1930 to 1940, practically all of the increase coming from the excess of the birth rate over the death rate. Observations in Puerto Rico, and all studies of its condition, show that it now has a larger population than can be adequately supported with present resources.

Custom and tradition.—In Puerto Rico, Spanish customs and traditions still predominate in daily living. Geographically and in many of its cultural ties, the Island is closer to South America than to North America. Although schools have been established, roads built, and public health measures taken under United States administration, Spanish remains the native language of the people and Latin standards of hospitality, family relationships, and social procedure prevail.

There has been a consistent effort to teach English in the public schools, not always with satisfactory results. Considerable doubt prevails among informed persons as to the efficacy of forcing bilingualism upon children at an early age. At present the public schools follow the policy of presenting the same subject matter in English for half the day and in Spanish for the other half of the day.

Holidays are observed not only for legal United States holidays but also for Discovery Day, Abolition Day, and other special occasions rooted in the Island's tradition.

The tropical climate calls for a totally different way of living from that found in the continental United States. The main meal is eaten at home at noon and in some cases is followed by a siesta during the hottest part of the day. Houses customarily have no windows or screens and everyone who can afford it sleeps under a mosquito net. Much of the living is done out of doors, and porches and balconies are always occupied.

Principal Lines of Employment

The economy of the Island is essentially agricultural and is based on the exchange of goods with other areas, principally the United States

mainland. Puerto Rico sells sugar, tobacco, grapefruit, pineapples, coffee, winter vegetables, and services (in the form of needlework). It buys food, clothing, and manufactured goods.[1] Approximately two-thirds of the population is rural and one-third lives in cities and towns. In 1935, greatest employment was offered by sugar growing and processing, the principal cash crop of the Island. Another principal source of employment was needlework, much of which was done by women in their homes through a system of agents and subcontracting. Materials to be embroidered or sewed were shipped in from New York, processed on the Island, and returned to the States for marketing. Needlework had grown to its commanding position in the Island's economy during the interval since World War days. By the time that European migrants had practically ceased to come to the United States, the needlework industry had found in Puerto Rico a new source of labor willing to accept low wages. The Fair Labor Standards Act of 1938, setting hourly wage rates of 25 and later 30 cents, had the temporary effect of drastically curtailing employment in needlework. Following the action in 1940 of a special industry committee in reducing the minimum to 12 cents for homework and 20 cents for factory work in needlework, some revival in employment is now taking place.

Besides sugar and needlework, tobacco growing and stripping formed in 1935 another large source of employment for Island workers. Other important industries or lines of employment were in coffee, fruit growing, building construction in San Juan and other cities, work on the wharves, and liquor distilling (the latter principally rum, a by-product of sugar).

Originally embodied in a congressional resolution of 1900, and reaffirmed in the Organic Act of Puerto Rico of 1917, was a provision limiting corporations authorized to engage in agriculture to a maximum land ownership of 500 acres. This requirement has not been effectively enforced, however,[2] and much of the arable land of Puerto Rico is in great sugar plantations, some locally owned, but many held by stockholders in the States. In recent years the question of enforcing the legal requirement has been revived [3] and efforts are now under way to raise funds to buy back the lands held by large corporations, as well as to solve other questions connected with enforcement.

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[1] "The reason for the existence of an exchange economy is that generally more goods are available for the population than under a strict self-sufficiency. Puerto Rico can produce sugar cheaper than the United States. The United States produces rice cheaper than Puerto Rico. Both areas benefit from the trade. The same situation is true of nearly all of the other products exchanged." (Puerto Rico Agricultural Experiment Station, Bull. No. 51: An Economic Background for Agricultural Research, by E. B. Hill and S. L. Descartes, San Juan, December 1939, p. 37.)

[2] Work Projects Administration and Puerto Rico Reconstruction Administration. Puerto Rico, a guide to the Island of Boriquen, New York, 1940, p. 57. See also press release, U. S. Department of Interior, dated January 14, 1941.

[3] In March 1940, the Supreme Court of the United States upheld the law. R. G. Tugwell was appointed by Secretary of the Interior Ickes in January 1941 to investigate methods of putting the law into effect.

Coffee and minor crops such as vegetables are known as "small men's crops" and are raised on units of ground much less extensive than are required for sugar. Individual peasants sometimes own or rent an acre or less of ground on which they raise a few chickens, perhaps a pig and a goat, and a few starchy vegetables such as plantain, yautia, and breadfruit.

Level of Income and Wages

FAMILY INCOME

No comprehensive data are available for a comparison of income and wages in the United States proper and on the Island. Detailed studies have, however, been made for certain sections.

The Puerto Rico Reconstruction Administration in surveys made in 1936 and 1937,[4] found annual family incomes among agricultural families in four areas of the Island averaging $171. These figures include the value of home-produced food consumed by the families but not the value of housing occupied rent free.[5]

TABLE 1.—*Annual Income of 5,743 Agricultural Families in Puerto Rico, 1936–37*

Area	Annual income from wages, products sold or consumed and other sources of income	
	Per family	Per capita
All areas combined	$171.29	$28.71
Tobacco area	176.98	28.96
Coffee area	155.88	27.31
Fruit area	205.77	32.36
Sugarcane area	254.63	48.59

A survey conducted in 1933 by social workers and rural home economics teachers of the Insular Department of Education [6] covered 150 rural families in 10 localities. The families surveyed were selected by the investigators, on the basis of their knowledge of the communities, to represent a high level, a medium level, and a low level within the community. Knowing the general standards of living

[4] Puerto Rico Reconstruction Administration. Health Division. Health and Socio-Economic Studies in Puerto Rico, I: Health and Socio-Economic Conditions on a Sugarcane Plantation, by P. Morales Otero, Manuel A. Perez, and others. (Reprinted from Puerto Rico Journal of Public Health and Tropical Medicine, June 1937.) Health and Socio-Economic Studies in Puerto Rico, II: Health and Socio-Economic Conditions in the Tobacco, Coffee and Fruit Regions, by P. Morales Otero, Manuel A. Perez, and others. (Reprinted from Puerto Rico Journal of Public Health and Tropical Medicine, March 1939.)

[5] All but 3.6 percent of the houses in the sugar area were owned by the occupants or were furnished rent free by the sugar "central." In the other areas combined houses were owned or furnished by employers in all but 2 percent of the cases. The percentage of owned homes is higher in the tobacco (52 percent) and in the citrus fruit (56 percent) areas. The percentage of houses furnished rent free by employers is highest in the coffee area (73 percent) and lowest in the citrus fruit area (42 percent).

[6] Puerto Rico, Department of Education. Bulletin No. 1, Whole No. 125: Rural Life in Puerto Rico, by Dorothy D. Bourne and Luz M. Ramos. Study 1: Standards of Living in Puerto Rico. San Juan, 1932.

prevailing in the communities and knowing the individual families and their positions in the communities, these investigators were assumed to be in a position to choose the families which, regardless of the actual amounts of their incomes, lived at planes which might be designated as high, medium, and low for their communities. The following statement shows the average weekly income which was ascertained for each of these three groups of families.

	Average weekly income	*Average persons per family*
50 families at high level	$18.06	8.1
50 families at medium level	6.39	7.7
50 families at low level	2.32	5.9

Many city families fared no better on the whole than rural ones. Of 8,159 families living in the slums of San Juan,[7] more than three-fifths (62 percent) had incomes of less than $7.88 during the week of the survey in 1938. This figure includes wages, income from business, gifts, relief, and "odd jobs," but not the value of home-produced food or income in kind from owned home. The families covered in the study constituted 30 percent of all families in San Juan and 27 percent of the entire San Juan population.

WAGES

Data on wage rates paid do not, of course, indicate total family incomes, because of the uncertainty as to length of time worked and number of earners contributing to the family purse. Nevertheless, information on wage rates paid suggests possible resulting family incomes. Average earnings paid to adult workers (largely unskilled workers) on farms and in industrial establishments for which the Insular Commissioner of Labor obtained data in 1938–39 are shown in table 2. They are compared with corresponding figures for adults (largely white collar workers) in commercial establishments. It is seen that hourly rates are not so different in the two types of employment, but that the clerical workers customarily work a full 48-hour week. Hence their actual weekly earnings are notably higher than those of wage earners.

[7] Puerto Rico Reconstruction Administration, Rural Rehabilitation Division. Estudio Preliminar de las Condiciones de Vida en los Arrabales de San Juan, Por Manuel A. Perez. San Juan, 1939. (For translated condensation of this study on living conditions in San Juan slums by Manuel A. Perez, see Puerto Rico Labor News, Vol. II, No. 3, May–June 1939.)

TABLE 2.—*Average Earnings of Wage Earners and Clerical Workers in Puerto Rico, 1938–39*[1]

Type and number of establishments, and sex of workers	Number of workers	Percent of full-time actually worked in week	Average hourly earnings (cents)	Full-time weekly earnings	Actual weekly earnings
Farms and industrial establishments (961)[2]	62,398	62.0	19.3	$9.55	$5.92
Men (938 establishments)	47,752	60.4	21.0	10.59	6.40
Women (315 establishments)	14,617	67.9	13.8	6.46	4.40
Commercial establishments (853)[3]	6,641	97.8	20.7	9.93	9.70
Men (842 establishments)	5,490	97.9	22.1	10.57	10.36
Women (231 establishments)	1,147	97.2	13.9	6.74	6.56

[1] Data are from Annual Report of Commissioner of Labor of Puerto Rico, 1938–39.
[2] Total figures include 29 boys and girls.
[3] Total figures include 4 boys and girls.

For 62,398 wage earners in the 961 farms and industrial establishments shown in table 2, the modal wage was 14 cents per hour and the median wage 17 cents. The distribution by hourly rates (not including home work) is indicated in the accompanying statement.

	Percent of workers		*Percent of workers*
4.99 cents or less	0.7	30 to 34.99 cents	2.6
5 to 9.99 cents	6.1	35 to 39.99 cents	1.6
10 to 14.99 cents	35.5	40 to 44.99 cents	2.3
15 to 19.99 cents	17.7	45 to 49.99 cents	3.5
20 to 24.99 cents	4.8	50 to 54.99 cents	1.0
25 to 29.99 cents	20.4	55 cents and over	3.8

The concentration at 25 to 30 cents per hour is probably explained by the Fair Labor Standards Act of 1938 which set a 25-cent hourly minimum for nonagricultural employment in lines affected by interstate trade.

The customary length of the workweek for a person fully employed was 48 hours, but actual hours worked by wage earners rarely reached that number, as indicated in table 2.

There was, of course, considerable difference in the wages paid in different lines of work and as between men and women. Data obtained by the Commissioner of Labor for 1938–39, indicate that the highest average earnings per hour for men employed in industrial enterprises and in agriculture, were found to be 49.8 cents paid to workers on wharves and the lowest, 6.1 cents received by men working in tobacco-growing fields. The average for 47,752 men in 938 farms and establishments of all kinds was 27 cents and the median hourly wage was 20 cents. These figures do not include earnings from home work, regarding which the Commissioner reported it virtually impossible to obtain accurate information.

Wages for 14,617 women (exclusive of home work) ranged from 4.4 cents (the average in truck gardening) to 27.3 cents (the average in hat factories). The average for women in 315 establishments and farms regardless of line of employment was 13 cents per hour.

Following are average actual weekly earnings as reported by the Insular Commissioner of Labor for the fiscal year 1938–39 for selected lines of employment:

	Men	*Women*
Building trades	$10.78	-----
Cigar factories	6.49	$4.56
Coffee growing	2.17	3.00
Coffee roasting	7.40	-----
Fruit planting	2.73	1.26
Hat factories	9.81	7.22
Sugarcane planting	3.67	-----
Sugar factories	9.41	3.90
Sugar refineries	8.46	3.46
Tobacco-growing fields	2.57	2.28
Tobacco stripping	4.93	4.39
Truck gardening	2.91	2.10
Wharves	3.87	-----

In 78 needlework establishments (factories) engaged in interstate commerce in 1939–40, average hourly earnings of 4 percent of the workers were below 12 cents; earnings of 14 percent were 12 cents (the figure set by the minimum wage law of the Island); earnings of 43 percent averaged from 13 to under 25 cents; 14 percent were paid 25 cents (the figure established by the Fair Labor Standards Act); and 25 percent earned more than that amount.[8]

The most extensive study of earnings of home workers in needlework [9] showed that in 1933–34, 84 percent of the women surveyed received less than 3 cents per hour and 97 percent less than 5 cents per hour. Total family earnings from all sources of these home workers amounted to less than $3 per week in 78 percent of the cases surveyed.

There is some evidence that Puerto Rican wages are increasing.[10] The general impact of Federal aid and defense programs in the Island,

[8] Data obtained by Insular Department of Labor. (Quoted by U. S. Department of Labor, Wage and Hour Division in its report, Puerto Rico: The Needlework Industry. Washington, 1940.)

[9] U. S. Department of Labor. Women's Bureau. Bulletin No. 118: The Employment of Women in Puerto Rico, by Caroline Manning. Washington, 1934. See also National Recovery Administration, Survey of Home Workers in the Needlework Industry, by Julio B. Ortiz and Mildred Hayes, San Juan, 1935 (mimeographed).

[10] Thus, the Annual report of the Puerto Rico Commissioner of Labor, 1938–39, states (pp. 48, 49):

> The number of wage earners receiving the lowest rates of pay has been decreasing steadily in Puerto Rico. In the fiscal year 1937–38, about 64.8 percent of the total number of workers in industry taken into consideration, received wages under $1.20 a day and $7.20 a week. This was already an improvement on the year 1936–37 when 73.5 percent of the total number of workers received such wages. But in 1938–39, 26,432 out of 62,398 under consideration, or only about 42.4 percent, received average wages under 15 cents per hour.
>
> The same thing holds true with reference to employees in commercial establishments. While in 1937–38, about 51 percent of such employees received wages under $1.20 a day or $7.20 a week, in 1938–39, about 46 percent only received such low wages.
>
> In 1937–38, the general average wage for industrial workers, including agriculture, was 15.7 cents per hour. In 1938–39, said average wage was 19.3 cents per hour.
>
> For workers in commercial establishments the general average wage in 1937–38 was 19.6 cents per hour, while in 1938–39 it was 20.7 cents per hour. * * *
>
> In general, there has been an improvement in the conditions of workers, as evidenced by higher wages for shorter hours of work. Wages, however, remain low, compared with continental scales, the highest average in industry being 49.8 cents per hour, and in commerce 65.3 cents, while the lowest rates were 5.7 cents per hour in industry, and 6.4 cents in commercial establishments.

For some discussion of wages paid prior to 1930, see Brookings Institution report: Porto Rico and its Problems, Washington, 1934.

together with improved economic conditions in the States (with which the Island's economy is closely tied), have shown some effect. So, likewise, has the Fair Labor Standards Act of 1938, which was made specifically applicable to the Island.

The trend toward increasing wages appears to be confirmed by data from claims for workmen's compensation. An analysis of 200,000 claims over a period of 4 years from 1935 to 1939, yields information on wage payments which were checked both with employees making the claim and their employers. Table 3 shows the median daily wage paid in the principal lines of employment.

TABLE 3.—*Median Daily Wage in 200,000 Claims for Workmen's Compensation in Puerto Rico, 1935–36 to 1938–39* [1]

Line of employment	1935–36	1936–37	1937–38	1938–39
General farming	$0.60	$0.65	$0.70	$1.00
Sugarcane plantations	.90	1.00	1.00	1.21
Sugar mills	1.00	1.00	1.08	1.50
Tobacco stripping and warehousing	.75	.80	1.00	1.00
Needlework and clothing manufacturers (factory)	1.00	1.00	1.00	1.00
Concrete construction	1.23	1.20	1.20	1.28
Railroad employment	1.16	1.00	1.11	1.16
Stevedoring and warehousing	2.40	2.56	3.05	3.60
Manual labor	1.00	1.00	1.10	1.21

[1] Data are from Puerto Rico State Insurance Fund, Bulletin No. 2: Analysis of Daily Wage, Wage Loss Compensation and Other Related Factors for the Policy Years 1935–39, by I. W. Jacobs, San Juan, 1940 (p. 60).

The figures cited in table 3, and the data reported by the Insular Commissioner of Labor for work on sugarcane plantations, tobacco growing, and fruit planting may be tentatively compared with figures on farm wage rates for Southern States on the mainland. Releases of the United States Department of Agriculture, Agricultural Marketing Service, show the wage rates (without board) for hired farm labor, given in table 4.

TABLE 4.—*Wage Rates (Without Board) for Hired Farm Labor in Southern Portion of the United States in Specified Months of 1938 and 1939*

Date	South Atlantic		East South Central	
	Per month	Per day	Per month	Per day
1938: January	$25.06	$1.19	$22.43	$1.02
April	24.43	1.15	22.73	1.00
July	25.11	1.19	23.05	1.03
October	24.40	1.16	22.66	1.03
1939: January	24.93	1.18	22.47	1.03
April	24.32	1.14	22.95	1.02
July	25.17	1.20	23.57	1.04
October	24.80	1.19	22.81	1.03

The daily rates for Puerto Rico compare favorably with those for hired farm laborers in Southern States. However, actual earnings are low in Puerto Rico because of the high degree of seasonality; for

example, 6 months of the year are characteristically the slow or dead season in sugarcane growing and processing. In view of the scarcity of data on annual earnings of farm laborers in Puerto Rico and in the United States, no precise comparison can be made.

Prices and Cost of Living

COST OF RECOMMENDED BUDGETS

Several attempts have been made to work out lists of foods which can be recommended from a nutritional standpoint and which would correspond, in part at least, with Puerto Rican dietary habits. The most recent food budget for persons in various age and activity groups, was prepared in terms of 12 groups of food with some suggestions of probable choices within each group, by Dr. Hazel K. Stiebeling of the United States Bureau of Home Economics.[11] This food budget provides a diet which can be interpreted in terms of Puerto Rican foodstuffs, which would be relatively low in cost and yet meet all now-known nutritional requirements.[12]

In evolving the proposed food budget, consideration was given to information on customary food consumption of urban families in Puerto Rico with average incomes of $734 per year. The average food consumption of these families is shown in table 12 of this article. The details of the recommended food budget are indicated in table 5.

The quantities of foods required, according to the Stiebeling diet plan, were computed by the United States Bureau of Labor Statistics for a family of 5 persons.[13] These were then expressed in terms of actual foodstuffs for which prices are reported by the Commissioner of Labor of Puerto Rico. Included in the potato and sweetpotato food group were yams and tanias. In the cereal and grain group, three-fourths of the weight was assigned to rice. In the meat, poultry, and fish group, 40 percent was assigned to beef, and 30 percent to codfish and other fish.

The cost at 1939–40 prices (table 7) of this adequate food budget for a family of five persons comes to a total of $353.86 per year or

[11] This food budget was submitted on September 7, 1940, for use by the Wage and Hour Division, U. S. Department of Labor, in connection with hearings before the Special Industry Committee for Puerto Rico. (See U. S. Bureau of Labor Statistics, A Preliminary Memorandum on Cost of Living in Puerto Rico, prepared by Alice C. Hanson, Washington, September 1940 (mimeographed).)

[12] In commenting on the diet, Dr. Stiebeling said, "This food budget includes more dairy products than Puerto Ricans customarily use. Their customary diets are extremely low in calcium as well as in many other nutrients. The quantities suggested for the various age and activity groups are sufficient to support with a fairly wide margin of safety persons of the average weight and stature found in the United States. Puerto Ricans tend to be much smaller in stature. This may be due in part to generations of existence on diets that are inadequate for optimal development. Somewhat less food than is indicated in the budgets would support adults of smaller stature. Children, however, should have the opportunity for diets as generous as these if they are to obtain the full measure of health and stature which their heredity would make possible."

[13] Husband, over 20 years of age, moderately active; wife, over 20 years of age, moderately active; a boy 13 to 15 years of age; a girl 8 to 10 years of age; and a boy 4 to 6 years of age.

$6.80 per week. Details of the cost of this diet are indicated in table 6, published here for the first time.

TABLE 5.—*A Low-Cost Adequate Diet for Puerto Rico—Food Required for Persons of Varying Age, Sex, and Activity* [1]

Family member	Kinds and quantities of foods for a year											
	Milk [2]	Potatoes, sweetpotatoes [3]	Tomatoes, citrus fruits [4]	Leafy, green, yellow vegetables	Mature dry beans, peas, nuts	Other vegetables, fruits [5]	Eggs	Lean meat, poultry, fish [6]	Rice, flour, cereals [7]	Butter	Other fats	Sugars
	Qt.	*Lb.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*	*Doz.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*	*Lb.*
Children under 2 years	260	80	50	15	3	30	18	------	40	7	------	3
Children 2 to 3 years	260	100	50	25	6	50	18	10	80	10	------	10
Boys:												
4 to 6 years	180	120	50	25	15	70	15	25	90	15	3	20
7 to 8 years	180	130	50	30	30	130	15	50	140	15	15	30
9 to 10 years	180	140	50	30	40	170	15	60	160	15	25	40
11 to 12 years	180	140	50	30	40	200	13	80	170	15	25	50
13 to 15 years	180	160	50	25	40	260	13	80	200	15	40	65
16 to 19 years	180	220	50	20	40	260	11	100	270	15	50	65
Girls:												
4 to 7 years	180	120	50	25	15	70	15	25	90	15	3	20
8 to 10 years	180	130	50	30	30	130	15	50	140	15	15	30
11 to 13 years	180	140	50	30	40	170	15	60	160	15	25	40
14 to 19 years	180	140	50	30	40	200	13	80	170	15	25	50
Men 20 years and over:												
Very active	90	300	50	20	80	260	11	120	320	15	65	80
Moderately active	90	160	50	25	70	240	11	100	200	15	30	65
Sedentary	180	140	50	30	40	200	13	80	160	15	25	40
Women 20 years and over:												
Very active	180	160	50	30	40	260	13	100	200	15	30	65
Moderately active	180	140	50	30	40	240	13	80	170	15	25	50
Sedentary	180	100	50	30	25	200	13	80	120	15	25	40
In pregnancy	365	140	50	40	25	280	15	80	140	15	25	40
In lactation	365	180	50	40	25	300	15	80	180	15	30	50
Yearly total for family	------	------	------	------	------	------	------	------	------	------	------	------
Monthly total (divide by 12)	------	------	------	------	------	------	------	------	------	------	------	------
Weekly total (divide by 50) [8]	------	------	------	------	------	------	------	------	------	------	------	------

[1] Prepared by Dr. Hazel K. Stiebeling, Senior Food Economist, U. S. Department of Agriculture, Bureau of Home Economics.

[2] Including fluid whole milk or its equivalent in evaporated milk, dried milk or cheese. (17 ounces of evaporated milk is equivalent to approximately 1 quart whole milk; 5 ounces of cheese is equivalent to approximately 1 quart whole milk.

[3] Including white potatoes, ñames, yucca, sweetpotatoes, and yautia.

[4] Including tomatoes and citrus fruit (grapefruit).

[5] Including bananas and plantains.

[6] Including beef, pork, poultry and fish.

[7] Including flour equivalent of bread and other baked goods.

[8] This rounded figure is used, instead of 52, because the recommended quantities are given in rounded numbers.

An earlier estimate was made in 1933 by the Insular Department of Labor, based on a list of foods submitted by Dr. Joseph Axtmayer of the School of Tropical Medicine.[14]

The only place in which a standard budget is set forth covering all items of family expenditure is in a pamphlet prepared by Mrs. Rita R.

[14] Puerto Rico. Department of Labor. Bulletin No. 5: A Report on Wages and Working Hours in Various Industries and on the Cost of Living, in the Island of Puerto Rico, During the Year 1933, by Artemio P. Rodriguez. San Juan, 1934. See also Annual Report of the Commissioner of Labor, 1933–34 (pp. 84, 85). The foods in that list represented a diet for a farmer which meets all the physiological requirements of his body. This diet was prepared on the basis of menus used at the University Hospital in San Juan and unquestionably represents a standard considerably higher than that generally attained by the population. According to calculations of the Insular Department of Labor, the weekly cost of this diet in 1933 was $3.19 per adult or $11.17 for a family of man, wife, and three children.

TABLE 6.—*Cost (at 1939–40 Prices) of a Low-cost Adequate Diet for Puerto Rican Family of Husband, Wife, and 3 Children* [1]

Food group	Unit	Relative weight	Price (cents)	Quantity for 1 year	Annual cost, at 1939–40 prices
Milk	Quart	100.0	10.3	810	$83.43
Fluid	Quart	90.0	[2] 9.6		
Evaporated	Quart	10.0	17.0		
Potatoes, sweetpotatoes	Pound	100.0	2.1	710	14.91
Potatoes	Pound	16.7	2.8		
Yams	Pound	16.7	2.0		
Tanias	Pound	16.6	2.3		
Sweetpotatoes	Pound	50.0	1.9		
Tomatoes, citrus fruit	Pound	100.0	4.0	250	10.00
Tomatoes	Pound	50.0	6.2		
Oranges	Pound	50.0	[3] 1.8		
Leafy, green, yellow vegetables	Pound	100.0	6.2	135	8.37
Cabbage	Pound	25.0	5.5		
Carrots	Pound	8.4	6.6		
Garlic	Pound	8.3	[4] 16.0		
Okra	Pound	8.3	6.5		
Onions	Pound	25.0	4.3		
String beans	Pound	12.5	4.4		
Pigeon peas, fresh	Pound	12.5	6.3		
Mature dry beans, peas, and nuts	Pound	100.0	6.9	195	13.46
Beans, white (American)	Pound	14.3	6.4		
Beans, white (Puerto Rican)	Pound	14.3	7.6		
Blackeyed peas	Pound	14.3	5.7		
Chickpeas	Pound	14.3	9.8		
Kidney beans (red American)	Pound	14.3	7.1		
Kidney beans (red Puerto Rican)	Pound	14.3	7.7		
Pigeon peas, dry	Pound	14.2	4.2		
Other vegetables, fruits	Pound	100.0	6.9	940	64.86
Bananas	Pound	33.4	[5] 1.0		
Coconuts	Pound	33.3	[6] 16.0		
Plantains	Pound	33.3	[7] 3.6		
Eggs	Dozen	100.0	33.6	67	22.51
Lean meat, poultry, fish	Pound	100.0	20.9	335	70.02
Beef, boneless	Pound	20.0	21.9		
Beef, dried	Pound	20.0	18.9		
Pork chops	Pound	5.0	21.8		
Pork, other	Pound	5.0	19.2		
Chicken	Pound	20.0	37.5		
Fish	Pound	15.0	12.3		
Codfish, salt	Pound	15.0	9.2		
Rice, flour, cereals	Pound	100.0	4.2	800	33.60
Rice	Pound	75.0	4.4		
Cornmeal	Pound	12.5	3.2		
Flour	Pound	12.5	4.0		
Butter, tub	Pound	100.0	16.7	75	12.52
Other fats, lard (mixed)	Pound	100.0	8.9	113	10.06
Sugar (second grade)	Pound	100.0	4.4	230	10.12
Total cost, per year					353.86
Total cost, per week					6.80

[1] This diet is based upon the low-cost adequate food budget shown in table 5.
[2] 1 liter=1.0567 quarts.
[3] 1 dozen oranges=4 pounds.
[4] 1 head garlic=1 ounce.
[5] 1 dozen bananas=4 pounds.
[6] 1 coconut (dry)=3 ounces.
[7] 1 plantain=½ pound.

Lang, issued in 1935 by the Social Service Department, Nutritional Division, of the Federal Emergency Relief Administration.[15] A

[15] Federal Emergency Relief Administration. Social Service Department. Recopilacion de datos sobre Nutricion adaptada a Puerto Rico. Recommendaciones para la preparacion de los alimentos que reparten las Comisarias y Jardines Comunales, by Mrs. Rita R. Lang. San Juan, 1935.

The pamphlet also presents menus for 1 week for a family of five persons, costing from 2.7 to 5.7 cents per person per meal. These menus were designed for guidance in utilization of food distributed by Commodity Distribution Centers and Puerto Rico Reconstruction Administration community gardens to families on relief. The menus represent a nutritionally wiser allocation of limited money for food than is customarily found among Puerto Ricans. Following is a sample of 1 day's menus for five persons. As the trend in food prices has been upward since 1935, the current cost of these menus would be somewhat higher. (Continued on p. 796.)

budget which was regarded as sufficient to meet the needs of a family of five persons of the lowest economic group for 1 week without incurring debts was calculated as follows:

Food	$3.45
Rent	1.05
Clothing	.89
Health	.58
Light, water, etc	.72
Miscellaneous	.45
Total	7.14

The budget was based upon a study of actual expenditures of 215 families of urban laborers,[16] and upon socio-economic analyses conducted at the University of Puerto Rico.

RETAIL PRICES

An important factor in the cost of living in Puerto Rico is the fact that many of the items which families buy are imported from the United States. Of the three most important constituents of the diet—salt codfish, rice, and beans—the first two are wholly imported, as are about 60 percent of the beans. Other items which are entirely imported are wheat and wheat preparations, canned vegetables, processed milk, cheese and butter, fats and oils.[17] Clothing, most types of furniture, and most manufactured articles are likewise imported.

Seventy-four items of household goods were priced at retail in various towns by the Insular Department of Labor for the fiscal year, 1939–40. During that year increases occurred in the prices of a number of the most important foodstuffs constituting the Puerto Rican diet. Of the 74 items priced, 42 showed increases over the corresponding figures for 1936–37 and 25 articles decreased in price. Many of the items which showed a decrease in price were articles not

Breakfast	
3 grapefruit	$0.03
¾ liter evaporated milk	.04
½ pound bread	.03
Coffee	.015
Sugar	.005
Oleomargarine	.01
Total cost	.13
Cost per person	.026

Noon meal	
½ pound codfish	.04
2 eggs	.05
½ pound string beans	.02
2 pounds sweetpotatoes	.02
¼ pound cornmeal	.01
Oil	.005
Vinegar	.0025
Milk	$0.01
Sugar	.01
Salt	.0025
Total cost	.17
Cost per person	.034

Evening meal	
Canned meat	.10
¾ pound rice	.03
¼ pound beans	.02
Tomatoes	.02
Lard and annato (achiote)	.01
Salt	.0025
¾ liter evaporated milk	.04
½ pound bread	.03
Total cost	.2525
Cost per person	.0505

[16] Puerto Rico. Department of Education. Study on the Distribution of the Weekly Expenditures of Laborers in the Urban Zone of Puerto Rico, by Luz M. Ramos. San Juan, 1933.

[17] See P. R. Agricultural Experiment Station Bulletin 55: The Food Supply of Puerto Rico, by E. B. Hill and J. R. Noguera, Rio Piedras, 1940; and Bulletin 51: An Economic Background for Agricultural Research in Puerto Rico, by E. B. Hill and S. L. Descartes, Rio Piedras, 1939.

usually within the financial reach of the majority of Puerto Rican consumers. Although the price of codfish was lower than in 1936–37, it was 2.1 cents higher than in 1938–39. The Insular Department of Labor estimates, on the basis of comparable figures, that in 1939–40 Puerto Rican consumers had to pay about $1,395,318 more than in 1938–39 for the rice they consumed, $583,961 more for the beans, and $542,747 more for the codfish.

Actual prices reported are shown in table 7.

TABLE 7.—*Average Retail Prices of Food and Household Articles in Puerto Rico, Fiscal Year, 1939–40* [1]

Commodity	Price	Changes with reference to 1936–37 prices		Commodity	Price	Changes with reference to 1936–37 prices	
		Increase	Decrease			Increase	Decrease
	Cents	*Cents*	*Cents*		*Cents*	*Cents*	*Cents*
Annato (Achiote) lb.	9.2		0.3	Kidney beans, red Puerto Rican lb.	7.7	1.5	
Arum (Malanga) lb.	1.1	0.6		Lard, mixed lb.	8.9	1.3	
Bananas, large doz.	4.6	5.1		Lard, pure lb.	10.8	5.2	
Bananas, small doz.	3.1	.7		Milk, condensed 16-oz. can	15.9		2.2
Beans, white, American lb.	6.4	1.9		Milk, cow's liter	10.1		.8
Beans, white, Puerto Rican lb.	7.6	1.6		Milk, evaporated 4-oz. can	4.0	.4	
Beef, boneless lb.	21.9		1.8	Meat, soup lb.	10.4	1.3	
Beef, dried lb.	18.9			Oatmeal 20-oz. can	17.6		3.8
Blackeyed peas lb.	5.7	1.8		Oil, mixed, cooking liter	57.5	3.2	
Bread 16-oz. loaf	7.1	.2		Okra lb.	6.5		1.6
Butter, Brookfield lb.	41.9	7.7		Oleomargarine lb.	16.8	(2)	(2)
Butter, tub lb.	16.7	10.6		Olive oil liter	88.1		13.8
Cabbage lb.	5.5		1.4	Onions lb.	4.3	.1	
Carrots lb.	6.6	.5		Oranges each	.6	.2	
Charcoal 5-gal. can	15.0	1.8		Peppers each	.6	.2	
Cheese, American lb.	27.4		2.3	Pigeon peas, dry lb.	4.2	.8	
Cheese, Puerto Rican lb.	33.3		3.3	Pigeon peas, fresh lb.	6.3	6.1	
Chicken lb.	37.5	(2)	(2)	Plantains each	1.8	.3	
Chickpeas lb.	9.8		.7	Pork lb.	19.2	1.0	
Coconuts, dry each	3.0	.6		Pork chops lb.	21.8	2.1	
Codfish, salted lb.	9.2		1.5	Potatoes lb.	2.8		.1
Coffee:				Rice, first grade lb.	4.7	.3	
First grade, unroasted lb.	22.5		7.2	Rice, second grade lb.	4.0	.3	
Second grade, unroasted lb.	20.8		6.8	Rice flour lb.	8.4		1.8
Roasted and ground lb.	33.3	(2)	(2)	Salt, common lb.	2.4	(2)	(2)
Corn, canned 16 oz.	12.2		2.3	Salt pork lb.	10.3	3.2	
Corn, dry hulled, Puerto Rican lb.	2.7		.1	Salt, table bag	3.0		1.7
Corn meal, yellow lb.	3.2		.2	Sardines 4-oz. can	5.8		.6
Eggs each	2.8	.4		Soap lb.	5.3		.3
Fish lb.	12.3	(2)	(2)	Starch lb.	5.2		1.2
Flour, white lb.	4.0	.1		String beans lb.	4.4	2.9	
Garlic head	1.0			Sugar, best grade lb.	5.3		.3
Guava paste lb.	10.0	1.0		Sugar, second grade lb.	4.4		.3
Ham lb.	25.0	1.2		Sweetpotatoes lb.	1.9	.1	
Kerosene oil liter	6.0	.1		Tanias lb.	2.3	.4	
Kidney beans, red American lb.	7.1	2.3		Tenderloin steak lb.	30.5	.6	
				Tomatoes lb.	6.2	.1	
				Vermicelli lb.	7.3	.6	
				Yams lb.	2.0	.9	

[1] Data are from report of Puerto Rico Department of Labor (cited in a Preliminary Memorandum on Cost of Living in Puerto Rico, by Alice C. Hanson, U. S. Bureau of Labor Statistics, Washington 1940).

[2] Data not available.

For comparable items of food for which it is possible to obtain price quotations (table 8), both in the States and in Puerto Rico, prices are about the same with a few notable exceptions. For a number of foodstuffs, the prices in Puerto Rico are higher, including, among other items, oatmeal, chicken, packaged butter, evaporated milk, cabbage, carrots, canned corn, and coffee when roasted and ground. The prices in the United States proper were higher in 1939–40 for the following items among others: Rice, pork chops, salt pork, bananas, oranges, string beans, and sweetpotatoes.

TABLE 8.—*Comparison of Food Prices for Comparable Food Items in United States and Puerto Rico, 1939–40*

United States proper [1]			Puerto Rico proper [2]		
Item	Unit	Price	Item	Unit	Price
		Cents			*Cents*
Flour, wheat	Pound	4.2	Flour, white	Pound	4.0
Corn meal	Pound	4.1	Corn meal, yellow	Pound	3.2
Rice	Pound	7.9	Rice, first grade	Pound	4.7
Rolled oats	20-oz.	8.9	Oatmeal	20-oz. can	17.6
Bread, white	Pound	8.0	Bread	16-oz. loaf	7.1
Beef, chuck roast	Pound	22.7	Beef, boneless	Pound	21.9
Pork chops	Pound	28.2	Pork chops	Pound	21.8
Salt pork	Pound	15.1	Salt pork	Pound	10.3
Ham, whole	Pound	25.5	Ham	Pound	25.0
Roasting chickens	Pound	29.8	Chicken	Pound	37.5
Butter	Pound	34.6	Butter, Brookfield	Pound	41.9
			Butter, tub	Pound	16.7
Cheese	Pound	25.7	Cheese, American	Pound	27.4
Milk, fresh	Liter	[3] 11.9	Milk, fresh	Liter	10.1
Milk, evaporated	14½-oz. can	6.9	Milk, evaporated	14½-oz	[4] 14.5
Eggs	Dozen	32.3	Eggs	Dozen	33.6
			Bananas:		
Bananas	Pound	6.3	Large	Dozen	4.6
			Small	Dozen	3.1
Oranges	Dozen	30.2	Oranges	Dozen	7.2
Cabbage	Pound	3.7	Cabbage	Pound	5.5
Green beans	Pound	11.9	String beans	Pound	4.4
Carrots	Pound	5.3	Carrots	Pound	6.6
Onions	Pound	4.2	Onions	Pound	4.3
Potatoes	Pound	2.6	Potatoes	Pound	2.8
Sweetpotatoes	Pound	4.5	Sweetpotatoes	Pound	1.9
Beans, navy	Pound	6.6	Beans, white American	Pound	6.4
Coffee	Pound	21.9	Coffee, roasted and ground	Pound	33.3
Corn, canned	16-oz. can	8.4	Corn, canned	16-oz. can	12.2
Lard	Pound	10.3	Lard, pure	Pound	10.8
Oleomargarine	Pound	16.3	Oleomargarine	Pound	16.8
			Sugar:		
Sugar	Pound	5.5	Best grade	Pound	5.3
			Second grade	Pound	4.4

[1] Prices for 51 cities collected by the Retail Price Division, U. S. Bureau of Labor Statistics.
[2] Prices collected by Division of Accounts, Property, and Statistics, Insular Department of Labor.
[3] Quart=12.6 cents.
[4] 4-oz. can=4 cents.

The movement of wholesale food prices in Puerto Rico follows in general that of wholesale food prices in the United States. This is true at least for the period, 1926 to 1934, for which data are available. Despite the differing component items in the indexes for the two countries, an index number of wholesale prices in San Juan for 39

articles of food [18] follows the same general pattern of movement as the Bureau of Labor Statistics index number of wholesale food prices in continental United States.[19]

The recent influx of military and civil officials and their families as a result of accelerated national defense activities in Puerto Rico is reflected in a scarcity of housing, and increases in rents, although no official figures are available on this point.

The general impression of residents and visitors to the Island is that clothing costs are somewhat higher than in the States, for comparable items, though here again official figures are lacking.

GENERAL DISTRIBUTION OF FAMILY EXPENDITURES

Despite the limited groups covered and the differing techniques used in the various studies, practically all of the surveys of actual family expenditures in Puerto Rico showed 60 percent or more of the outlay going to food. Clothing takes about 10 cents of every dollar and the small residue is used for medicines, occasional bus fares, bets on cock fights or races, dues to mutual-aid and funeral societies, and other miscellaneous purchases. Expenditures for housing are very small, as many employers provide housing for their workers, and other families live on the land without legal right or obligation.

Table 9 summarizes the findings of a study by the Insular Department of Education.

TABLE 9.—*Average Weekly Distribution of Expenditures of Rural Families in Puerto Rico, 1933* [1]

Item	Low level	Medium level	High level
Number of families	50	50	50
Average number of persons per family	5.9	7.7	8.1
Average weekly income [2]	$2.32	$6.39	$18.06
Average weekly expenditures	2.68	6.65	14.88
Percent of expenditures for—			
All items	100.0	100.0	100.0
Food [2]	74.9	67.1	57.4
Rent	.7	2.9	5.2
Operating expenses	3.4	4.1	8.4
Clothing	9.9	11.0	11.8
Health	5.0	4.9	5.8
Recreation	1.8	4.0	5.1
Miscellaneous	4.3	6.0	6.3

[1] Data are from Puerto Rico Department of Education, Bulletin No. 1, Whole No. 125: Rural Life in Puerto Rico, by Dorothy D. Bourne and Luz M. Ramos. Study 1: Standards of Living in Puerto Rico. San Juan, 1932.

[2] Includes value of home-produced food consumed by the family.

[18] Universidad de Puerto Rico, Facultad de Administracion, Comercial Boletin No. 5: Indice de Precios al por mayor de productos alimenticios en el Mercado de San Juan, por Esteban A. Bird. San Juan, 1935. (This publication presents an index number covering 39 articles of food important in the Puerto Rican diet. Rice receives a weight of 28 percent in the total index. The index has not been carried forward since 1934.)

[19] With average prices in 1926 as 100, the index of wholesale food prices in the United States fluctuated between 94 and 106 from 1926 to 1929, then started a sharp downward movement which continued until 1933 when a low of 54 was reached. In the ensuing year a substantial upturn was noted, with the index reaching 76 in September 1934. The index for San Juan, Puerto Rico, also computed on a 1926 base, showed a slight downward tendency even in 1927 and 1928, but registered the same relative upswing in the latter parts of the years of 1928 and 1929 as did the United States index. From 1930 to 1933 the movement was generally sharply downward, with the low point of 50 in February 1933 being reached at about the same time as in the States. By April 1934 the Puerto Rico index had returned to 68, approximately the same point as the United

Studies made by the Puerto Rico Reconstruction Administration in 1936 and 1937 [20] disclosed the following average weekly distribution of expenditures among agricultural families:

	Families on sugarcane plantation 1936	*Families in tobacco, coffee, and fruit areas 1937*
Number of families	745	5,743
Average number of persons in family	5.2	6.0
Average weekly income	$6.27	$4.24
Average weekly expenditure	6.51	4.64
Percent of average weekly expenditure for—		
All items	100.0	100.0
Food	65.7	73.3
Rent	[1].3	[1].4
Clothing	12.2	9.5
Health	5.8	4.0
Recreation	5.7	3.5
Transportation	3.2	3.0
Other	7.1	6.3

[1] Most of the houses were owned by the occupants or were furnished rent-free by the sugar "central," the term used for a corporation which owns a sugar mill and the adjacent sugar lands.

ACTUAL DIET, AND FOOD EXPENDITURES

Rice, beans, and salt codfish, all imported, together with native vegetables, such as sweetpotatoes, plantain, yautia, and breadfruit, constitute the diet of the vast majority of the population. There is some use of tropical fruits such as mangoes, bananas, coconuts, and citrus fruits, but not so much as would be desirable from a nutritional standpoint.

Families living in the country may own a pig or chickens, but less often a cow, and the available evidence is that milk consumption is far below nutritionally desirable levels. Of the 860 families on a sugar cane plantation covered in the survey already noted, 40 percent used no milk at all in their daily diet, 17 percent used milk from their own cows, 37 percent purchased cow's milk, 4 percent used goat's milk and 1 percent used canned milk. The highest milk consumption, found among the 17 percent owning their own cows, was three-quarters of a pint per capita per day.

Another study was made in 1937 of the diets of 800 families of laborers of the Puerto Rico Reconstruction Administration distributed in 4 agricultural areas of the Island.[21] The purpose of this survey was to determine the adequacy and deficiencies in the diet of these laborers, so that the findings might serve as the basis for nutritional edu-

States index. Figures for Puerto Rico since 1934 are not available but for continental United States the upward movement continued until 1937 when a high of 88 was reached. There followed a recession to a low of 67 in 1939 and a slight upturn to 74 in 1941.

[20] See footnote 4, p. 788.

[21] Puerto Rico Reconstruction Administration. Health Division. Health and Socio-Economic Studies in Puerto Rico (III): Nutritional Studies in the Rural Region of Puerto Rico, by Mrs. Rita R. Lang and staff of the dietetic unit, with the cooperation of Dr. Pablo Morales Otero. San Juan, 1939.

cation and for selection of foods to be grown in community gardens developed as a part of the Puerto Rico Reconstruction Administration program.

In this survey, it was found that the men do most of the family food buying, once a week, in a nearby store where the prices are usually higher than in the stores in town. Practically the same purchases are made each week. The women are seldom informed about the quantity of foods purchased and the price paid. As the housewives do not use accurate measurements, it was necessary to compute the weekly food intake and divide by seven to estimate the daily intake. Many friends, not living in the house, were found to be taking three meals a day with the family and were counted as persons fed from the family food supply. In each of the four areas, typical weekly food consumption was found to be below suggested dietary allowances in the intake of calories, protein, fat, calcium, carbohydrate, phosphorus and iron, vitamins A and B-G; in fact, in every food element except vitamin C.[22] Even the families living in the fruit zone used relatively small amounts of fruits, and the visiting nutritionists received a general complaint against the use of fruits and fruit juices because they cause "cold in the stomach." The investigators reported that the families had practically no notion of a balanced diet and aimed principally to fill their stomachs with the most inexpensive foods they could buy or vegetables which they raised. Those in the areas which had been longest in the P. R. R. A. program showed a better knowledge of balanced diets and greater consumption of proteins and vitamins, though their actual diets still fell below suggested allowances.

The diet most commonly reported in each of the four regions is shown in table 10.

[22] The following tabulation gives a comparison of food intake of 800 agricultural families in four areas with suggested allowances, 1937:

Item	Suggested allowances	Actual food intake			
		Coffee area	Tobacco area	Fruit area	Sugarcane area
Calories	3,000.00	2,190.40	2,112.89	1,951.59	2,442.42
Protein grams	75.00–112.00	54.53	50.27	45.24	62.04
Fat grams	83.30–100.00	32.34	37.48	32.89	59.79
Carbohydrate grams	487.50–525.00	451.30	339.90	367.04	415.67
Calcium grams	.62–.68	0.213	0.3057	0.2091	0.3617
Phosphorus grams	1.28–1.32	0.874	0.8346	0.7044	0.9845
Iron grams	.012–.015	0.0099	0.0105	0.00844	0.01127
Vitamin A units	2,000.00	[1] 895.87	[1] 528.49	[1] 912.53	[1] 365.58
Vitamin B-G units	900.00	[1] 87.49	[1] 63.02	[1] 30.55	[1] 52.50
Vitamin C units	15.00	[1] 40.33	[1] 23.16	[1] 14.03	[1] 10.24

[1] Not all vitamins A, B-G and C have been determined in all foods, so the intake shown may be lower than actual intake.

TABLE 10.—*Most Common Diet Reported in 4 Areas of Puerto Rico, 1937*

Meal	Coffee area	Tobacco area	Fruit area	Sugarcane area
Breakfast	Coffee with milk.	Coffee with milk	Coffee with milk	Coffee with milk; bread or crackers; butter.
Lunch	Rice and beans.	Codfish and starchy vegetables.	Codfish and starchy vegetables.	Codfish or fresh fish; rice and beans; starchy vegetables.
Dinner	do	Rice and beans	Rice and beans	Rice and beans.

Except in the sugarcane area, the incomes of these families averaged about $5 per week and ranged as high as $21. In the sugarcane area, the range in income was wider, up to $30 per week, but the average income was only $6.76. Their food expenditures ranged from $1 to $16 per week, as indicated in table 11.

TABLE 11.—*Economic Characteristics of 800 Puerto Rican Laborers' Families Under P. R. R. A. Program, 1937*

Item	Coffee area	Tobacco area	Fruit area	Sugarcane area
Number of families	200	200	200	200
Average number of persons per family	5.88	6.33	6.79	5.64
Range of members per family	2–13	1–13	1–15	2–12
Average weekly income per family	$4.84	$4.84	$5.23	$6.76
Range of weekly income per family	$2.40–20.00	$0.06–15.75	$1.05–21.64	$0.25–30.10
Range of weekly food expenditures per family	$1.15–12.27	$1.03–15.60	$1.88–14.12	$1.68–14.00
Percent of families—				
Owning cows	8.0	15.0	35.5	10.5
Owning goats	14.0	24.0	21.0	19.0
Owning pigs	22.5	19.5	45.0	45.5
Using milk	50.0	86.5	83.5	96.5
Quantity of milk per person per day, ounces	2.93	3.80	1.85	4.15

The diet of 150 rural families surveyed by the Department of Education was also found to consist largely of rice and beans, with small use of animal foods and dairy products. Annato (achiote) sauce, rich in vitamin A, was reported frequently, used as a dressing with rice.

The number of meals served a day and the time at which they are eaten vary in a striking manner, according to the differences in income. Take for instance, the low [level] family in Juncos. The first day of the week they ate breakfast at 7:30 a. m., coffee with goat's milk and bread; at 11:30 a. m., luncheon, "Serenata de bacalao" and boiled rice; at 3 p. m., "merienda," coffee and milk; at 5 p. m., dinner, vermicelli, sausage, and cabbage soup. The second day at seven they had coffee with goat's milk and at 11 a. m., vermicelli, rice and vegetable soup. At 4 p. m. a neighbor sent them something but they cooked nothing for themselves. The third day they had coffee with goat's milk at 7 a. m., and rice and codfish and salt pork for luncheon; at 4 p. m. the neighbors sent something for the children. The fourth, fifth, and sixth days there was no food in the house. The seventh day all they had was the breakfast at 7 a. m. and it consisted of coffee with goat's milk. The home economics teacher and social worker added a comment: "This is a typical poor family." [23]

[23] Puerto Rico. Department of Education, Bulletin No. 1, Whole No. 125: Rural Life in Puerto Rico, by Dorothy D. Bourne and Luz M. Ramos. Study 1: Standards of Living in Puerto Rico, San Juan, 1932 (pp. 31, 32).

That food consumption of urban families is also confined largely to starchy foods is shown also by studies of the Agricultural Experiment Station. In table 12 are shown estimated per capita yearly consumption of certain foods, based on data from 1,901 families in 22 cities and towns of the Island. Rice, beans, potatoes, plantains (a banana-like food used as a vegetable), and bananas show heavy consumption though there is less use of codfish than by rural families.

TABLE 12.—*Estimated Yearly Per Capita Consumption of Different Foods, 1,901 Families in 22 Cities of Puerto Rico, 1938* [1]

Item	Unit	Price per unit	Yearly per capita consumption	Item	Unit	Price per unit	Yearly per capita consumption
		Cents				*Cents*	
Rice	Pound	4.6	152.3	Butter:			
Beans	Pound	7.0	45.2	30 cents or less	Pound	21.5	2.9
Potatoes	Pound	2.9	54.2	31 cents or more	Pound	49.4	1.7
Sugar	Pound	4.4	58.7	Sweetpotatoes	Pound	1.8	38.7
Coffee (ground)	Pound	31.9	12.8	Yautia	Pound	2.7	39.0
Bread	Pound	10.0	42.9	Ñames	Pound	3.1	10.5
Beef	Pound	19.2	35.0	Plantains	Each	2.2	94.6
Pork	Pound	20.0	10.0	Yucca	Pound	1.6	2.6
Hens and chickens	Pound	25.0	15.2	Lettuce	Bundle	2.7	19.7
Eggs	Dozen	31.0	12.2	Fresh tomatoes	Pound	5.4	23.6
Fish	Pound	10.9	8.2	Tomato sauce	Pound	------	6.7
Codfish	Pound	8.5	16.3	Cabbage	Pound	4.6	11.4
Fresh milk	Quart	11.2	89.2	Peppers	Pound	5.5	8.7
Evaporated milk	Pound	------	4.4	Corn flour	Pound	3.7	8.8
Condensed milk	Pound	------	.1	Bananas (green and ripe)	Each	------	218.3
Cheese	Pound	34.5	1.8				

[1] Data are from Puerto Rico Agricultural Experiment Station, transmitted by U. S. Bureau of Home Economics. Data for the 22 cities (exclusive of San Juan) are presented in greater detail in Puerto Rico Agricultural Experiment Station Bulletin No. 52: Consumo de Alimentos en la Zona Urbana de Puerto Rico, by S. Diaz Pacheco, April 1940. The average annual income of the 1,901 families was $734. Comparable data for 2,645 families in San Juan in 1937 are presented in Puerto Rico Agricultural Experiment Station Circular No. 107: El Consumo de Alimentos en la Ciudad de San Juan, by S. L. Descartes and S. Diaz Pacheco, June 1938.

Comparison of these figures with those for 2,645 families in San Juan in 1937 shows that milk consumption was about the same in San Juan and the 22 cities and towns. Higher consumption was reported in San Juan for beef and chicken, fish (other than codfish), potatoes and tomato sauce. San Juan families, on the other hand, consumed less codfish, sweetpotatoes, yams, yautias, cabbage, and rice.

An estimate has been made of per capita consumption of foods in Puerto Rico, in 1938 based on production reported by the 1035 census and import figures. These data have been compared [24] with findings for families of wage earners and clerical workers in the United States from whom records of food consumption for 1 week were obtained by the Bureau of Labor Statistics and analyzed by the Bureau of Home Economics.[25] These show the per capita Puerto

[24] Puerto Rico Agricultural Experiment Station. Bulletin 55: The Food Supply of Puerto Rico, by E. B. Bill and J. R. Naguera, Rio Piedras, 1940, p. 15.

[25] Stiebeling, Hazel K., and Phipard, Esther F.: Diets of Families of Employed Wage Earners and Clerical Workers in Cities. (U. S. Dept. Agr., Cir. 507, table 64, pp. 122-125, 1939.)

Rican consumption to be above that of 222 Negro families in Southern cities for rice, beans and other legumes, starchy vegetables, fruits and nuts, sugar, coffee, fresh milk, pork (other than fresh pork), and codfish. Their consumption was lower for wheat and its preparations, green and leafy vegetables, processed milk, cheese, butter, fats, meats and poultry, fish (except codfish), eggs, and miscellaneous foods.

Housing Conditions

The population pressure is reflected in crowded housing conditions. Family relationships are more flexible than on the mainland and relatives, or persons with even more remote claims, are frequently sheltered by the family. It is not uncommon to find as many as 10 or 12 persons living in a 1- or 2-room hut having no more than 2 or 3 beds. Averages of 4, 5, or 6 persons per sleeping room have been reported in a number of studies.[26] Sometimes the only beds are hammocks, or board platforms, and the only seats wooden boxes or the floor.

Even in the country areas the houses are often grouped so closely together that there is no room for gardens. On the edges of the cities have developed slums—squatters' shacks built on stilts to raise them above the mud flats.

In the survey of 860 families on a sugarcane plantation in 1936, it was found that the houses were frequently built in places where the soil is poor or swampy, to avoid encroaching on the sugarcane land. The most usual house was built of wood, with a galvanized-iron roof. About 10 percent were merely huts, built with sugarcane leaves. Houses of minor officials of the sugar "central" had 3 or 4 rooms, but those of the workers consisted of only 1 or 2 rooms and a kitchen in a small lean-to-shed. There was an average of 3.5 persons per sleeping room, and among 65 percent of the total population surveyed in this study, one room was shared for sleeping by an average of 4.6 persons.

The report states:

> The furniture used by the families is scanty and of the cheapest quality. A large proportion of the houses have only a few benches, some empty boxes, a small table, one or two cots, and a home-made wooden bed and some of them have even less. However, in many of the houses there are at least one imported iron bed and some chairs.

Of the 860 sugarcane families, 43 percent had no sanitary conveniences of any kind in their homes, 52 percent used latrines, and 5 percent had water-closet installations. Two-fifths of the families having latrines shared their use with one or more other families. Flies were reported in 95 percent of the dwellings, rats in 87 percent, and

[26] See Health and Socio-Economic Studies in Puerto Rico; Puerto Rico Department of Education Bulletin No. 1, Whole No. 125; U. S. Women's Bureau Bulletin No. 118; and U. S. Public Health Bulletin No. 237.

mosquitoes in 68 percent; in 52 percent of the families all three of these nuisances were found.

Electricity is commonly found in urban homes in Puerto Rico, and gas is used as a cooking fuel in the largest cities. In villages and rural areas, fuel used for cooking is largely charcoal or wood picked up free.

In the cities the poorer families live in squatters' shacks on mud flats. Those able to afford better quarters live in what might be called row apartments (one- and two-room dwellings with only two-way ventilation), with all the activities in the front room visible from the street.

The Insular Department of Labor sponsors housing improvements under a homestead law, but such low-cost houses meet only a small fraction of the need. A $10,000,000 low-cost housing program, sponsored by the United States Housing Authority is now under way in Puerto Rico. The Puerto Rico Reconstruction Administration has developed a number of model urban apartments and detached urban single family houses, as well as single family houses in semiurban communities and detached rural houses. The number of such urban dwellings is about 1,050, while the rural and semiurban dwellings approximate 5,350. Rental collections on these houses have been 85 to 96 percent and on many of the projects there are waiting lists of applicants. Often, however, these houses rent at a level which the average worker's family in Puerto Rico cannot afford. All of these developments help, but do not fully meet the actual need in Puerto Rico.

Health Conditions

In view of the income, food, and housing situation of the mass of Puerto Rican families, it is hardly surprising that health conditions are distressing on the Island. The death rate per 1,000 population is almost twice as great in Puerto Rico as in the Continental United States and the birth rate is more than twice as great.

Table 13 shows the comparative death rates for certain age groups.

TABLE 13.—*Death Rates for Certain Age Groups in Puerto Rico and in Continental United States, 1934* [1]

Age group	Deaths per 1,000 population		Ratio of Puerto Rican death rate to that of continental United States
	Puerto Rico	Continental United States	
All ages	19.3	11.0	1.8 to 1.0
Under 1 year	158.9	57.7	2.8 to 1.0
1–4 years	28.8	4.5	6.4 to 1.0
5–14 years	5.2	1.5	3.5 to 1.0
15–29 years	9.8	3.1	3.2 to 1.0
30–44 years	12.6	5.6	2.2 to 1.0
45–64 years	23.7	17.3	1.4 to 1.0
65 years and over	99.6	80.0	1.2 to 1.0

[1] Data are from U. S. Treasury Department, Public Health Service, Bulletin No. 237: Illness and Medical Care in Puerto Rico, by Joseph W. Mountin, Elliott H. Pennell, and Evelyn Flook, Washington 1937, p. 4.

Included among the chief causes of death in Puerto Rico are diseases which play a much smaller role in the continental United States. Tuberculosis heads the list, with a death rate per 100,000 population of 296 for 1930–34. This is nearly 5 times the rate in the United States for the same period.[27] The second main cause of death is the group of intestinal disorders known as diarrhea and enteritis, with a death rate of 256 for children under 2 years and of 155 for persons 2 years and over. Also included among the 13 principal causes of death for 1932–36 are malaria, syphilis, hookworm disease, dysentery, and typhoid fever.

In a survey in 1935 by the U. S. Public Health Service in cooperation with the Insular Department of Health, 31,756 individuals representing 5,891 families in different parts of the Island were canvassed. The number of bed illnesses found per 1,000 of these persons [28] for respiratory diseases was 3 times as great as that reported for 5 rural counties on the mainland. This high figure is attributed to an epidemic of influenza. There were 75 times as many malaria bed illnesses, and twice as many puerperal cases including normal labor. The report states that the failure of the data to provide a count of the cases of tuberculosis is due to the fact that tuberculosis was reported under symptomatic diagnoses such as fever, hemoptysis, anemia, pain in the chest, lung trouble, cough and fever, weakness, and fatigue.

The survey found that illness rates are considerably influenced by the economic status of the population.

When annual family money income was used as the criterion for determining the economic status, total illness rates were noted to decline steadily as the family income increased. Considering the entire sample population, the total illness rate was 444 cases per 1,000 persons in families whose annual income was less than $100; 436, when the income was between $100 and $249; 363, for those families earning between $250 and $749; while a rate of 297 cases per 1,000 individuals was reported in families having an annual income of $750 or more. Since one-half of the entire population of the Island falls in the income category of less than $100, it will be appreciated that the higher illness rate prevails much more generally than the lower. The effect of family income upon illness rates would seem to be more important among the urban population than the rural, since in the urban group a greater difference was noted in the amount of illness reported when the lowest income class was compared with the highest.

Among the 860 sugarcane families surveyed in 1936, the tuberculin test was made for 1,425 persons; of these 60 percent reacted positively. Altogether 3,835 samples of blood from the surveyed area were examined for malaria and 11 percent gave a positive result.

[27] Source: Annual Reports of the Commissioner of Health, quoted in Health and Socio-Economic Studies in Puerto Rico, II (p. 233).

[28] U. S. Public Health Bulletin No. 237, p. 24. (The median family income of this group was $100 per annum and the average income was estimated to be about $230, p. 5.)

Hookworm and other intestinal parasites were estimated to be harbored by a large percent of the population and to account for much of the diarrhea and gastrointestinal disorders. Seventy-nine percent of the persons on the sugarcane plantations whose stools were examined harbored parasites of one kind or another in their intestines.

Puerperal septicemia was found to be an important problem among families in the tobacco, coffee, and fruit regions.

Attempts have been made, not very successfully thus far, to furnish pure water supplies to the towns. Rural supplies come from wells and rivers, and in the country persons may frequently be seen walking along the roadside carrying home water in square kerosene cans.

Despite important medical contributions by the public health authorities, the School of Tropical Medicine, and the Puerto Rico Reconstruction Administration, as well as private physicians, the health problems of Puerto Rico are so closely connected with problems of income, nutrition, and housing that only fundamental economic improvements can bring permanently better health conditions.[29]

Limitations of Existing Studies

Although as has been shown, a number of studies bearing upon living and health conditions of Puerto Rico have been made, they deal with particular aspects of the problem, or with a limited group of families. It is difficult to pool the results of these surveys, since they were usually limited as to purpose and method and were conducted at different times. The results are not presented in any standard form and it is frequently difficult or impossible to determine the actual procedures used, the basis upon which samples were chosen, the location of families interviewed, the period of time covered, the definitions used for income, expenditures, deficits, and other crucial items. The studies cited[30] all throw light on the problems of Puerto

[29] For further discussion of health situation in Puerto Rico see: Health Work in the Rural Areas of Puerto Rico, by P. Morales Otero and Manuel A. Perez; Health and Socio-Economic Studies III: Physical Measurements of Agricultural Workers; and IV: Physical Impairments of Adult Life Among Agricultural Workers; also U. S. Department of Labor, Children's Bureau, Publication No. 217.

[30] The historical background of present-day Puerto Rico is summarized in the WPA guidebook (see footnote 2, p. 787), which also includes a readable account of the government, agriculture, industry, commerce, and labor of the Island, as well as a description of the people, architecture, education, religion, and cultural life of the Island.

Two other studies must be mentioned in listing contributions to an understanding of living conditions of Puerto Ricans:

(1) The Porto Rican Peasant and His Historical Antecedents, by Jose C. Rosario (published as an appendix in the Brookings Institution report on Porto Rico and Its Problems). This work traces the condition of the common man on the Island from the arrival of Ponce de Leon in 1509 up to the mid-1920's. Some data are presented on population, housing, health, economic conditions, education, cultural opportunities, marriage and illegitimacy, and politics. Recommendations include mobilizing thought in favor of the peasant (*jibaro*), finding a means to limit the birth rate and to check consensual marriages, teaching better methods of farming, improving education and health, establishment of industries, teaching cooperative selling of produce, improving roads, and stimulating a system of villages.

(2) Comerío, A Study of a Puerto Rican Town, by Charles C. Rogler (University of Kansas Publications Social Science Studies, Lawrence, Kans., 1940.)

Rico, however, and they all point to widespread malnutrition and poor health among the population and to levels of living substantially below those of most workers in the continental United States.

New Survey of Incomes and Expenditures

Field work was commenced in January 1941 on a survey of incomes and expenditures of a cross-section sample of 5,000 families of wage earners in Puerto Rico. This will be the first survey to be based on a carefully chosen random sample of families of wage earners in all major lines of employment and all parts of the Island. It will also be the first family-living survey to be developed along lines comparable to recent similar official investigations in the States.

The survey is being conducted as a project of the Federal Work Projects Administration, sponsored by the Insular Department of Labor and the Insular Department of Education. The Insular Department of Health and the School of Tropical Medicine are also cooperating.

The United States Bureau of Labor Statistics has cooperated in the development of technical plans for the investigation and will assume joint responsibility for the final report. An advisory committee comprising representatives from the three insular government departments named, as well as from the Insular Department of Agriculture the School of Tropical Medicine, the University of Puerto Rico, the Agricultural Extension Service, the Agricultural Experiment Station and individual economists, statisticians, nutritionists, and social workers is also cooperating in the survey. Field work will be done by trained social workers of the Department of Education and the Department of Health and by vocational agriculture teachers and vocational home economics teachers of the Department of Education. Other field workers will be drawn from the WPA rolls and given a period of intensive training.

The survey will provide data on a cross-section sample of family incomes which are urgently needed in the determination of social policy in the Island. It will also provide basic figures which can be utilized later in the development of weights for an index of the cost of living of wage earners. Information on housing, health, and food consumption will serve as a basis for testing plans for adapting the Island's economy to the demands of the emergency defense situation. Data on food consumption, including both purchased and home-produced foods, will be analyzed in cooperation with the School of Tropical Medicine and the University of Puerto Rico, to ascertain the nutritional adequacy of the diet of Puerto Rican wage earners, and will be studied in relation to the physical fitness of the population.

In addition to the purposes mentioned, the study will yield data bearing upon conditions of crucial importance in determining policy with respect to such problems as—

1. The availability of a surplus labor supply with indication of the extent of training of individuals unemployed or partially employed.
2. The extent to which present income levels and food supply require to be supplemented in order to bring the diet of the majority of the population to a level of adequate nutrition.
3. The extent to which native foods already enter the customary diet of the Puerto Ricans, and the nutritive value of a possible wartime emergency diet restricted to those foods alone.
4. Determination of the rental levels for which low-cost housing projects should be developed.
5. The extent to which wages should be subsidized by relief.
6. The extent to which women and children must supplement the principal earner's wages to maintain the family.
7. Factors to be taken into consideration in a wage negotiation or arbitration.
8. The extent to which public agencies are carrying the burden of furnishing medical attention to low-income families, and the proportion of families receiving no medical care.
9. Income levels at which manufacturers and merchants can sell certain commodities in Puerto Rico.
10. Distribution of expenditures by a representative cross section of wage earners' families in Puerto Rico.
11. Comparison of apportionment of actual family expenditures for food, rent, clothing, etc., with those found in standard budgets adapted to Puerto Rico.

DEVELOPMENT OF COOPERATIVES IN LATIN AMERICA

ALTHOUGH cooperative effort appeared in Latin America as early as 1884, development has on the whole been rather slow. In recent years the pace has been accelerated considerably in several countries (such as Brazil, Ecuador, Mexico, and Venezuela) by acts or decrees defining cooperatives and designed to encourage their formation. In Colombia, Mexico, and Nicaragua cooperatives are also given certain special privileges or exemptions.

As all of these countries are predominantly agricultural, it is natural that agricultural cooperation has developed farther in most of these countries than have consumers' cooperatives. Exceptions are Colombia and Mexico. In Argentina, consumers' distributive associations, although second only to agricultural cooperatives as regards both number and amount of business, are far outstripped by the electricity associations in point of membership. In Colombia consumers' cooperatives lead in number of associations, but as regards business done the credit cooperatives come first.

Some extremely large individual associations are found in Latin America: Argentina has two associations having 9,700 and 17,600 members, respectively; Brazil has one with 10,000 members; and Chile one with 24,400. It is of interest that in certain countries (Argentina, Brazil, Chile, and Mexico) the cooperatives have drawn their membership from specific occupational groups. In both Argentina and Brazil, the association of railroad employees is the largest single cooperative organization. In Chile the soldiers' cooperatives together account for the largest aggregate membership, and railroad workers' cooperatives hold second place.

Cooperatives among students and teachers are an important feature of the cooperative movement in both Brazil and Mexico.

Argentina

The cooperative movement of Argentina has grown rapidly during the past decade. From 1930–31 to 1938–39 the number of associations more than doubled, the membership more than tripled, and the amount of business nearly tripled.

The agricultural cooperatives hold first rank among the cooperatives as regards amount of business done, and also form the largest group of associations, numbering 315 in June 1939. About half (152) of these are marketing associations specializing in particular crops. The other 163 are general-purpose associations which have a number of departments performing various services. Thus, they not only

market their members' crops but also provide them with credit, insurance, all kinds of household and farm supplies, and drugs.

Table 1 shows the status of the Argentine cooperative movement.

TABLE 1.—*Status of Cooperatives in Argentina, 1938–39*

Type of association	Number of associations	Number of members	Amount of business, 1938–39
			Pesos [1]
Consumers' distributive associations	77	80,651	18,581,868
Electricity associations	70	114,635	1,490,514
Credit associations	51	27,600	17,004,963
Insurance associations	37	47,950	6,154,387
Agricultural processing and marketing associations	315	48,245	90,445,739
Other	68	15,425	16,015,706

[1] Exchange rate of Argentine peso in 1938–39=31.7 cents.

The development of cooperatives of all types combined is shown in table 2 for the years 1930–31 to 1938–39.

TABLE 2.—*Development of Cooperatives in Argentina, All Types Combined, 1930–31 to 1938–39*

Year	Number of associations	Number of members	Amount of business (in pesos [1])	Year	Number of associations	Number of members	Amount of business (in pesos [1])
1930–31	257	95,734	53,506,000	1935–36	496	216,600	100,600,000
1932–33	416	129,400	53,900,000	1936–37	517	243,295	107,517,614
1933–34	381	136,400	64,500,000	1937–38	550	293,908	131,313,220
1934–35	445	178,430	80,470,040	1938–39	618	334,506	149,693,177

[1] Exchange rate of Argentine peso in 1938–39=31.7 cents.

The consumers' associations, though numbering only 77 in 1939, had over 80,000 members. These associations include two unusually large organizations. One of these, El Hogar Obrero, in Buenos Aires, combines the functions of a consumers' cooperative, credit association, and housing association. In 1939 it had 9,701 members, paid-in capital of 2,398,327 pesos, and savings deposits in its credit department amounting to 951,724 pesos. Over a period of 8 years it built for its members a series of 160 small houses. It has recently completed four large blocks of apartments; ownership of the buildings is retained by the cooperative, which rents them to its members. Another large association is the State Railroad Employees' Cooperative, with 17,643 members and capital amounting to 1,536,146 pesos; its annual business in 1937–38 amounted to 7,338,515 pesos, on which it made a patronage refund amounting to 261,101 pesos.

Unlike the situation in most countries in which there are electricity associations, these associations in Argentina are in urban, not rural, areas. They had a difficult time, being opposed by the great utilities which are owned for the most part by foreign capital. Nevertheless, they have been growing steadily, largely because of the fact that

municipalities have become members of the electricity cooperatives. The first of these associations was formed in 1926–27. By June 1939 there were 70 of these societies with a membership of 114,635.

There are four cooperative federations in Argentina—one for consumers' associations, one for agricultural associations, and two for electricity associations. About half of the consumers' cooperative associations in Argentina are affiliated to the Federation of Argentine Consumers' Societies. The federation became a member of the International Cooperative Alliance in 1940.

The Land Settlement Act, passed in August 1940, established a National Agricultural Council of five members, one of whom is to be chosen by the agricultural cooperative associations. One of the functions of this council is to further the development of cooperatives.

Brazil

In 1935 there were in Brazil 179 cooperative associations with 50,584 members, distributed by type as follows:

	Associations	*Members*
School cooperatives	94	14, 960
Consumers' associations	22	26, 214
Building associations	1	2, 682
Productive, credit, and mixed associations	36	5, 691
Agricultural associations	26	1, 037

Until 1938, the freedom of action of cooperative associations was considerably hampered by the restrictions imposed by a law of 1932 and several later amendments, and the cooperative movement developed very slowly. In 1938 a special decree restored their "complete liberty of action," and led to a rapid expansion. In 1939 a decree established a special cooperative section in the Ministry of Agriculture, Transport, and Public Works.

By 1940 there were 1,016 associations with 131,169 members. Most of the cooperatives are agricultural, but there are also 256 consumers' cooperatives (of these more than 100 are school cooperative associations), and 251 credit cooperatives.

The greatest development of cooperatives has taken place in the State of São Paulo.

The largest consumers' cooperative is the Railway Workers' Cooperative of Rio Grande do Sul, with 10,000 members. Included among the consumers' cooperatives is one telephone association.

Chile

In Chile, the cooperative movement is encouraged by the Government under the Cooperative Act of October 17, 1925, and later amendments.

Consumers' cooperatives have had the greatest development, and tend to follow occupational lines. The largest membership is that of the soldiers' cooperatives, which at the end of 1938 had 24,421 members. Societies of railway employees had an aggregate membership of 14,201.

In 1938 there were, altogether, 57 consumers' cooperatives, with a total of 63,739 members. Agricultural cooperatives—a more recent development—numbered 38 and had 1,941 members. The business of the consumers' cooperatives during 1937 (the latest year for which there is information) amounted to 83,245,581 pesos.[1]

Colombia

Recent legislation giving cooperative associations the status of public utilities has given impetus to the cooperative movement in Colombia. The law recognizes 8 types of associations: Consumers', marketing, building, credit, insurance, house-owning, workers' productives, and associations of private industries. It confers upon them certain privileges, among them (1) priority of transport, on the railroads, for their perishable goods, and reduced charges therefor, and (2) the right to be consulted and represented on all organizations having to do with the provision of foodstuffs (credit cooperatives have the same right as regards credit organizations).

The statement below shows the development of cooperatives, all types combined, since 1933:

	Associations	*Members*
1933	4	1,087
1934	16	3,380
1935	25	5,519
1936	48	13,182
1937	84	19,886
1938	120	27,498
1939	170	36,808

Credit and consumers' cooperatives form the leading types of associations. The number and business of each type during 1939 is shown below:

	Associations	*Business (pesos [a])*
Consumers' cooperatives	68	2,583,932
Housing associations	4	409,233
Credit associations	56	16,495,090
Workers' productives	23	468,436
Agricultural marketing associations	9	5,123,322
Dealers' cooperatives	7	1,351,670
Other	3	45,922
Total	170	26,477,605

[a] Exchange rate of Colombian peso in 1939=57.1 cents.

[1] Exchange rate of Chilean peso in 1937=5.17 cents.

Ecuador

Cooperatives in Ecuador are regulated by a cooperative act issued November 19, 1937. That act directs the Department of Cooperatives in the Ministry of Social Welfare to supervise and encourage cooperatives. It sets up certain standards for associations, such as the return of patronage refunds, the creation of reserves, and the allocation of a proportion of earnings for educational purposes.

Credit cooperatives are required to form federations. Other types of associations are given permission to do so.

No statistics are available for cooperatives in this country.

Honduras

Decree No. 116 of February 28, 1936, authorizes the establishment of cooperative societies for the sale of goods in installments, under the club plan. Members are to make weekly payments, and the order in which they are to receive goods is fixed in the bylaws of the society in each case. The quality of goods is to be specified for the protection of the purchasers. The law lays down certain conditions which must be met in the purchase of furniture, clothing, shoes, etc.

Mexico

Cooperatives in Mexico are governed by a general law signed on January 11, 1938, superseding earlier legislation. This law covers all types of cooperatives, and is administered by the Ministry of National Economy. Under it only members of the working classes are permitted to form cooperatives; aliens are forbidden to hold positions of direction or general administration in them; and cooperatives cannot join chambers of commerce or associations of producers. The act formulates standards of cooperative procedure to which associations must adhere. In the case of consumers' cooperatives, these organizations are required to admit into membership all persons who comply with the membership requirements, and net earnings on their patronage must be applied toward the purchase of qualifying "certificates of contribution" or (if the patron fails to become a member) must be turned over to the National Fund of Cooperative Credit. The Minister of National Economy is specifically empowered to utilize cooperatives for the distribution of goods to the public when he deems it advisable, to combat the high cost of living.

Workers' productives may undertake any labor or productive enterprise, and may even establish a consumers' cooperative section within the productive association. In order to insure the continuance of the cooperative character of the enterprise, workers' productives must take in new persons only as full members or associates; they are for-

bidden to hire wage workers except in certain extreme conditions and then the net earnings from their labor must be applied toward the purchase of a membership or (if they do not join the association) be paid to the National Fund of Cooperative Credit.

Every cooperative association is required to become a member of the regional federation and every such federation must join the National Confederation of Cooperatives.

Cooperatives are exempted from certain taxes, and there are other regulations which encourage their growth.

The Cooperative Bureau of the Ministry of National Economy has an educational section, an organization and audit section, and a correspondence school.

In 1935 there were 698 consumers' cooperatives with 36,042 members, 462 agricultural and productive cooperatives with 16,681 members, and 279 associations of various types with 12,547 members.

By the middle of 1938 the number of consumers' associations had risen to about 1,000. Some of these, formed by trade-union members, admit only unionists to membership. The other associations operate on the open-membership principle. The cooperative associations have a national league—an educational body. There is as yet no wholesale association, but the need for one is recognized.

Since 1936 a system of cooperative farms has developed in the Laguna region in the States of Coahuila and Durango. It is reported that some 30,000 families (consisting of about 165,000 persons) are taking part in these 308 cooperative farms. With the assistance of the State offices, these families have formed 57 cooperative stores, and a wholesale association is planned. Cooperative cotton gins, electric-power plants, irrigation systems, several cooperative hospitals and clinics, and even 3 small railway systems, have been started to serve the cooperative farms. The children in 177 of the 284 rural schools have their own cooperatives.

School cooperatives are also numerous elsewhere. In Mexico City alone, according to a report by the Minister of Public Education in September 1939, there were 434 student-teacher cooperatives with 79,261 members.

A number of Spanish refugees, including former officials and members of an old-established cooperative housing association in Madrid, founded a similar association in Mexico City in 1939.

Nicaragua

According to a decree of January 31, 1935, cooperative societies of workers' unions which have for their purpose mutual aid and compulsory saving (*ahorro obligado*) among their members are exempt from certain specified registration fees, from direct tax on property, and

certain other specified fees. Such societies are also given the privilege of franking strictly official mail and are allowed 3 free telephone calls per day as well as telegraph messages up to 15 words per day on strictly official business.

Peru

In the spring of 1940 the Institute of Cooperation of Peru was started by a group of persons interested in cooperatives. The purpose of the Institute is to promote the formation of cooperatives and encourage their development. One of the first acts of the Institute was to draw up and submit to the Peruvian Congress a bill authorizing the formation of cooperatives.

A publishing association has been formed by the Institute and is issuing a periodical.

Uruguay

No statistics are available as to the number of cooperative associations in Uruguay, but it was reported in 1939 that more than 18,000 persons were members of cooperatives.

There is a national league to which about one-third of the cooperators belong. This league has organized a cooperative school, a social club, and a theatrical association.

Venezuela

On July 22, 1939, a decree was issued authorizing the formation of consumers', housing, and producer cooperatives. Associations formed under it must divide their net earnings as follows: 25 percent to reserves, 25 percent to social institutions, and 50 percent to the members in proportion to their business with the association. Associations are authorized to accept savings deposits from members and others, provided they pay a small rate of interest.

The Bolivar Society of Venezuela was directed by the decree to promote the development of the cooperative movement in the country. This work, it is reported, is being carried on vigorously.

SOURCES: This article is based upon data from the following sources: Colombia, Contraloria generale de la República, Dirección Nacional de Estadística, Anuario generale de estadística, Colombia, 1939 (Bogotá, 1940), and Anales de Economia y Estadística, Tomo III, No. 5 (Bogotá, 1940); Honduras, La Gaceta (Tegucigalpa), March 9, 1936, pp. 1–2; Nicaragua, La Graceta (Managua), March 22, 1935, p. 537; report from Willard Galbraith, United States consul at Mexico City; Pan American Union, Division of Agricultural Cooperation, Bulletin No. 16: The Cooperative Movement in Chile (Washington, 1940); International Labor Office, Cooperative Information, No. 6, 1938, Nos. 5, 7, 8, and 9, 1940, and No. 1, 1941; Cooperative Builder (Superior, Wis.), November 2, 1940; People's Yearbooks for 1938, 1939, 1940, and 1941; Review of International Cooperation (London), October 1940; and Brazil, Economia (São Paulo), February 1941.

SALARIES AND WORKING CONDITIONS IN POLICE DEPARTMENTS[1]

Summary

SALARY scales for police departments are affected by a variety of factors. Civil service and other legal requirements for minimum rates of pay, size of city, and geographic location, together with the related consideration of cost of living in different localities, the financial condition of the city, the proportions of employees in various ranks or occupations, hours worked per week, and items supplied free of charge, all have a bearing on the salaries paid to employees of police departments. In this article salaries are correlated with three of these factors—occupation or rank, size of city, and geographic location. Certain additional information is presented on hours and other conditions of work in police departments.

There were 90,703 employees of police departments engaged in protecting the lives and property of more than 48,400,000 persons in 362 cities throughout the country, on July 1, 1938. At the rates of pay in effect at that time, the annual salaries of these municipal employees totaled approximately $212,700,000. Thus, in these cities there were 19 police-department employees per 10,000 of population and the annual pay-roll expenditure was $4.39 per capita. The average annual salary per employee was $2,345. When the New York City department is excluded, these averages are reduced to 17 employees per 10,000 of population, $3.74 per capita, and $2,181 per employee, respectively.

The greatest variation in salaries resulted from differences in occupation or rank within a department. For example, the highest salary reported was $12,500 paid to the commissioner who headed the New York City department; yet in the same city, salaries of $960 were reported for cleaners in the maintenance division. The lowest salary paid to a head of a department was $1,440, received by the chief in Enid, Okla.

Average annual earnings decreased directly with the size of city. Thus, in New York City the average was $2,940, and in the 12 other cities with a population of 500,000 or more, the average was $2,355, as contrasted with $1,907 in the 175 cities with a population of 25,000 to 50,000.

The geographic comparison indicates that in the Middle Atlantic (exclusive of New York City), East North Central, and Pacific cities, annual salaries averaged about $2,300, whereas in the East and West South Central cities the averages were $1,711 and $1,746, respectively.

[1] Prepared in the Bureau's Division of Construction and Public Employment, under the supervision of Herman B. Byer, chief. For a more detailed report see Serial No. R. 1253.

Scope of Study

This article summarizes the findings of a comprehensive survey of salaries, hours, and working conditions in municipal police departments, conducted by the Division of Construction and Public Employment of the Bureau of Labor Statistics in cooperation with the Work Projects Administration.

The present analysis is based on reports received from 362 cities with a population of 25,000 or more. Because of the size of the New York City department, together with its unusually high salary scale, figures for this city are shown separately in the tables and chart. A separate study has already been published for New York City [2] and more detailed information will be available for each of the other 361 cities.

Salaries in Relation to Occupation

Approximately three-fourths of all employees of police departments were patrolmen, and their salaries consequently dominated the distribution of salaries for all employees shown in table 1. Although annual rates of pay of patrolmen ranged from about $580 to $3,000, less than 1 percent of all patrolmen received less than $100 a month. The highest salaries reported for patrolmen were $3,000 in New York City and also in a few medium-sized cities near New York City. The wide variation in patrolmen's salaries is due not only to differences in size of city and location but also to the fact that in some departments patrolmen are divided into as many as 5 grades (in New York City into 7), the lowest frequently consisting of rookie or probationary policemen. Nine out of ten patrolmen throughout the country, however, were in the first grade, and over a fourth of these received from $2,050 to $2,250 in 1938. About a fifth had annual salaries between $2,350 and $2,550, and a slightly higher proportion received $3,000 a year. Most of the latter were in New York City.

The salaries of 512 policewomen, which are also shown in table 1, compare very favorably with those of patrolmen.

Chiefs, as might be expected, were the best paid of the police-department employees. The top salary outside New York City (where there was no chief reported and a commissioner headed the department) was $9,000 for the chief in Jersey City. In Chicago and Detroit, officials with the title of commissioner were paid $10,000 a year, but these salaries were excluded from the tables because the departments also reported chiefs. This conforms with the practice followed in this survey of excluding all commissioners (whether they received a nominal fee of $100 or a salary of $10,000), unless they were designated as department chiefs. If other officers were acting as

[2] This is incorporated in Bureau of Labor Statistics Bulletin No. 685, Vol. II.

chiefs, they were reported under their official title—usually captain. More than one-fifth of the chiefs shown in table 1 received at least $4,050 per year. About one-seventh of the departments (the majority of these being in the smallest cities) paid their chiefs from $2,350 to $2,550 a year, while an equal number paid between $3,450 and $3,650.

There were 156 executive assistants to chiefs, classified as assistant or deputy chiefs, or assistant deputy chiefs. In New York City the corresponding work was done by 6 deputy commissioners. The salaries of these high ranking officers, though naturally somewhat lower than those of chiefs, were in the upper salary brackets. About one-fourth of the assistants, most of whom were in the largest cities, received $4,050 a year or more, the maximum outside of New York City being $7,000 a year. In that city, however, 1 deputy commissioner was paid $9,000.

The other ranking officers whose duties were directly related to the actual supervision of personnel were 179 inspectors, 983 captains, 2,149 lieutenants, and 5,060 sergeants. Inspectors were the highest paid of these, almost three-fifths receiving $4,050 or more. Without exception, the inspectors in this salary class were in the departments of New York City and of other cities with a population of 100,000 or more. Although less than 3 percent of the captains outside New York City had salaries of $4,050 or more, 10 percent received between $3,950 and $4,050. In the New York department the rank of captain carried a salary of $5,000. Outside this city fewer than 2 percent of the lieutenants were paid as much as $3,750, and all but 3 percent of the sergeants earned less than $3,050. The corresponding salary scales for these ranks in the New York City department were $4,000 and $3,500, respectively, while lieutenants who were acting captains in this department received $4,500.

Although a few of the 7,068 employees in the detective bureaus had salaries of $4,050 or more, practically five-sixths of them were in the range from $1,250 to $3,050. If the detective bureau of New York City (which handles the fingerprint work of that department) were eliminated from the comparison, the percentage of detectives in the other 361 cities receiving less than $3,050 a year would be 95. The greatest concentration of detectives outside New York City, as was the case with patrolmen, was in the $100 interval beginning at $2,150.

The fingerprint sections in practically all cities were closely related to the detective bureaus. In some cities (e. g., New York) which had no separate fingerprint sections, the detective bureaus did the necessary fingerprinting. In 176 of the 362 reporting cities there were separate fingerprint sections, which had a total of 422 employees. The salaries of these workers covered a wide range, as the duties varied from those of a file clerk to those of a highly trained technician.

The salary distribution for all occupations shown in table 1 also includes 1,133 radio and telephone operators, 246 mechanics, and a group of 7,512 other police-department employees who were primarily nonuniformed employees engaged in maintenance and clerical work.

TABLE 1.—*Municipal Police-Department Employees in the United States in Selected Occupations, by Salary, July 1, 1938*

Salary class	All occupations [1]						Chiefs					
	All cities	New York City	Size of city [2]				All cities	New York City	Size of city [2]			
			500,000 and over	100,000 to 500,000	50,000 to 100,000	25,000 to 50,000			500,000 and over	100,000 to 500,000	50,000 to 100,000	25,000 to 50,000
Cities reporting specified occupations	362	1	12	79	95	175	359	1	12	79	94	173
All salaries	90,703	19,556	31,247	23,646	8,613	7,641	359	1	12	79	94	173
Under $950	265	------	[3] 53	[4] 103	[5] 64	[6] 45	------	------	------	------	------	------
$950–$1,049	164	23	13	58	37	33	------	------	------	------	------	------
$1,050–$1,149	222	2	102	74	24	20	------	------	------	------	------	------
$1,150–$1,249	749	91	108	222	240	88	------	------	------	------	------	------
$1,250–$1,349	456	52	95	102	72	135	------	------	------	------	------	------
$1,350–$1,449	960	65	109	206	260	320	1	------	------	------	------	1
$1,450–$1,549	1,633	185	106	659	302	381	------	------	------	------	------	------
$1,550–$1,649	3,032	35	248	1,217	621	911	------	------	------	------	------	------
$1,650–$1,749	4,440	148	497	1,833	948	1,014	2	------	------	------	------	2
$1,750–$1,849	3,924	38	395	1,390	994	1,107	3	------	------	------	------	3
$1,850–$1,949	5,581	7	394	3,791	725	664	3	------	------	------	------	3
$1,950–$2,049	6,139	1,813	485	2,561	603	677	6	------	------	------	------	6
$2,050–$2,149	6,613	------	3,469	1,884	807	453	7	------	------	------	------	7
$2,150–$2,249	11,950	86	7,466	3,041	759	598	5	------	------	------	------	5
$2,250–$2,349	3,195	399	1,189	1,068	383	156	6	------	------	------	------	6
$2,350–$2,449	6,773	40	4,326	1,764	447	196	35	------	------	1	5	29
$2,450–$2,549	8,163	22	5,856	1,288	591	406	17	------	------	1	5	11
$2,550–$2,649	4,088	9	3,646	262	108	63	9	------	------	------	4	5
$2,650–$2,749	866	3	505	181	119	58	17	------	------	------	3	14
$2,750–$2,849	1,027	75	513	205	81	153	11	------	------	1	2	8
$2,850–$2,949	843	6	647	45	127	18	6	------	------	------	3	3
$2,950–$3,049	15,238	13,744	260	1,030	156	48	33	------	------	2	11	20
$3,050–$3,149	281	7	170	73	18	13	7	------	------	1	3	3
$3,150–$3,249	821	566	177	45	7	26	6	------	------	2	------	4
$3,250–$3,349	66	3	11	29	15	8	14	------	------	------	6	8
$3,350–$3,449	82	------	24	37	14	7	7	------	------	1	3	3
$3,450–$3,549	1,295	1,050	49	158	28	10	16	------	------	3	9	4
$3,550–$3,649	135	3	57	47	14	14	36	------	------	10	13	13
$3,650–$3,749	161	------	20	138	2	1	2	------	------	2	------	------
$3,750–$3,849	34	1	22	4	5	2	7	------	------	2	3	2
$3,850–$3,949	11	------	5	4	1	1	4	------	------	2	1	1
$3,950–$4,049	989	839	91	38	16	5	19	------	------	10	4	5
$4,050 and over	507	[7] 244	[8] 139	[9] 89	[10] 25	[11] 10	80	1	12	41	19	7

[1] Includes 24,914 employees for whom salaries by occupation are not shown separately. For greater detail see Serial No. R. 1253.
[2] Based on U. S. Census of Population for 1930.
[3] Includes employees whose salaries range from $720 to $900.
[4] Includes employees whose salaries range from $313 to $945.
[5] Includes employees whose salaries range from $240 to $948.
[6] Includes employees whose salaries range from $468 to $945.
[7] Includes employees whose salaries range from $4,200 to $12,500.
[8] Includes employees whose salaries range from $4,050 to $7,920.
[9] Includes employees whose salaries range from $4,050 to $9,000.
[10] Includes employees whose salaries range from $4,095 to $6,000.
[11] Includes employees whose salaries range from $4,100 to $5,000.

TABLE 1.—*Municipal Police-Department Employees in the United States in Selected Occupations, by Salary, July 1, 1938*—Continued

Salary class	Patrolmen						Policewomen					
	All cities	New York City	Size of city				All cities	New York City	Size of city			
			500,000 and over	100,000 to 500,000	50,000 to 100,000	25,000 to 50,000			500,000 and over	100,000 to 500,000	50,000 to 100,000	25,000 to 50,000
Cities reporting specified occupations	362	1	12	79	95	175	123	1	10	48	31	33
All salaries	[12]64,918	14,684	23,526	15,895	5,723	5,090	512	127	194	125	32	34
Under $950	4				3	1	1					1
$950–$1,049	15				14	1	2			2		
$1,050–$1,149							1				1	
$1,150–$1,249	202			27	147	28	7				1	6
$1,250–$1,349	113			1	14	98	4			1		3
$1,350–$1,949	532			86	191	255	1				1	
$1,450–$1,549	939			457	230	252	20		4	12		4
$1,550–$1,649	2,121		45	877	490	709	10			2	1	7
$1,650–$1,749	3,181		119	1,602	707	753	19			10	3	6
$1,750–$1,849	2,582		154	892	730	806	42		18	16	4	4
$1,850–$1,949	4,012		168	2,994	454	396	12			8	3	1
$1,950–$2,049	4,885	1,781	406	1,848	354	496	35		14	18	1	2
$2,050–$2,149	5,374		3,117	1,311	615	331	66		50	13	3	
$2,150–$2,249	10,171		6,864	2,251	605	451	23		2	15	6	
$2,250–$2,349	2,069	383	916	481	272	17	8			5	3	
$2,350–$2,449	5,255		3,508	1,382	265	100	72		51	18	3	
$2,450–$2,549	7,011	8	5,375	871	449	308	20		16	3	1	
$2,550–$2,649	2,818		2,795	2	12	9	39		39			
$2,650–$2,749	64		58	2	4		2			2		
$2,750–$2,849	116	37				79	1	1				
$2,850–$2,949	107			20	87							
$2,950–$3,049	13,347	12,475	1	791	80		127	126			1	

[12] Includes officers on motorcycles, in cruiser and safety cars, and assigned to traffic duty (either foot or mounted); and special agents.

Although the above discussion has been confined primarily to interoccupational differences in salaries for the country as a whole, figures are available [3] for similar comparisons of interoccupational differences for each of the four population groups as well as for New York City. In general, these salary distributions show that for a given occupational rank, the larger cities paid higher salaries than the smaller ones.

Salary in Relation to Size and Location of City

The general tendency for police departments in the large cities to pay higher salaries than those in smaller cities is illustrated in the upper section of the chart on page 823. The percentage of employees receiving less than $1,550 per year decreased consistently from 13 percent in cities having 25,000 to 50,000 inhabitants to only 2 percent in New York City and in the 12 other cities of 500,000 or more. In all except these 13 cities, the largest concentration was in the $500 interval from $1,550 up to $2,050. This salary range covered 57 percent of the employees in the smallest cities and about 45 percent of those in the 2 groups of cities with 50,000 but less than 500,000

[3] See Serial No. R. 1253.

inhabitants. On the other hand, 71 percent of the employees in the 12 largest cities other than New York City received from $2,050 to $2,550. At the upper levels of the salary distribution—salaries of $2,550 and over—the proportions ranged from only 6 percent in the smallest cities to 20 percent in the group with a population of 500,000 or more. The contrast between New York City and other cities throughout the United States is most marked in this comparison. Nearly 85 percent of the New York police-department employees received at least $2,550 a year.

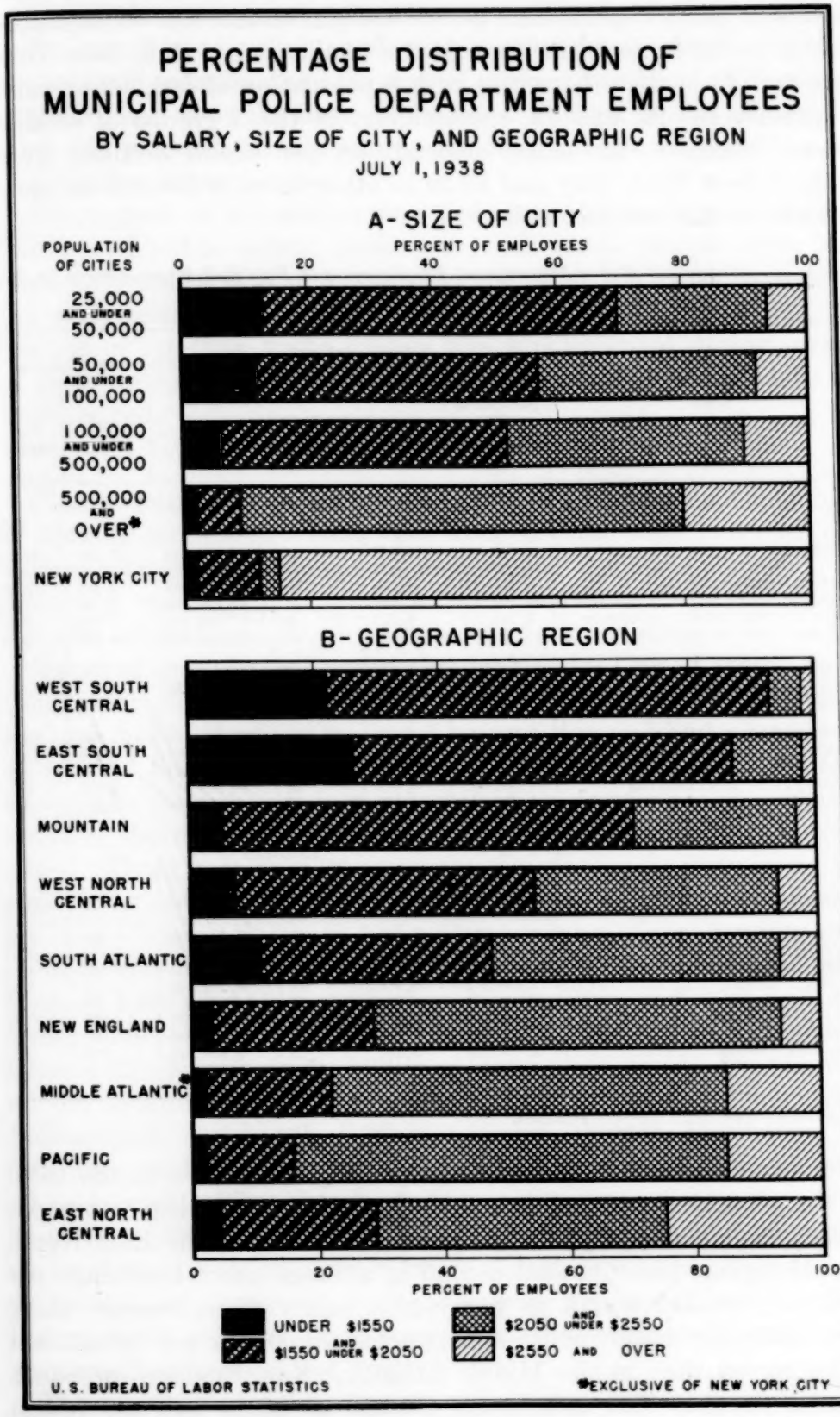
In section B of the chart the 9 geographic regions have been arranged, with the region paying the lowest salaries at the top. The first 4 geographic divisions had the greatest concentration of salaries in the interval from $1,550 to $2,050. The percentages were 71 in the West South Central, 61 in the East South Central, 66 in the Mountain, and 48 in the West North Central States. St. Louis was the only city in any of these 4 regions which had as many as 500,000 inhabitants. The most frequently reported salaries in the remaining 5 regions were in the $500 interval beginning at $2,050. The proportions in this salary range were 46 percent in the South Atlantic region, which included Washington and Baltimore; 46 percent in the East North Central, including Chicago, Detroit, Cleveland, and Milwaukee; 63 percent in the Middle Atlantic, which excluded New York City but included Philadelphia, Pittsburgh, and Buffalo; 65 percent in New England, including Boston; and 69 percent in the Pacific States, where San Francisco and Los Angeles were the largest cities.

A better indication of the influence of more strictly regional factors on salaries is obtained when the comparison is restricted to the cities with a population of 25,000 and under 50,000 in each of the 9 regions. When the cities of this size in each division are ranked on the same basis as all cities in the chart, the divisions appear in the following order: West South Central; East South Central; South Atlantic; West North Central; East North Central; Pacific; Mountain; New England; and Middle Atlantic.

Thus, when the effects of differences in populations have been eliminated insofar as the form of the data permit, the geographic pattern of salaries in police departments appears more clearly. In general it may be stated that cities in the South paid the lowest salaries in 1938 and those in the Northeastern section, the highest. Between these extremes were the Western States and the North Central States, salaries in the former being somewhat higher than in the latter area.

Police Protection Related to Concentration of Population

The problems of concentrated populations result in relatively larger police forces and considerably higher salaries in large cities than in


PERCENTAGE DISTRIBUTION OF
MUNICIPAL POLICE DEPARTMENT EMPLOYEES
BY SALARY, SIZE OF CITY, AND GEOGRAPHIC REGION
JULY 1, 1938
A - SIZE OF CITY
POPULATION OF CITIES
PERCENT OF EMPLOYEES
0
20
40
60
80
100
25,000 AND UNDER 50,000
50,000 AND UNDER 100,000
100,000 AND UNDER 500,000
500,000 AND OVER*
NEW YORK CITY
B - GEOGRAPHIC REGION
WEST SOUTH CENTRAL
EAST SOUTH CENTRAL
MOUNTAIN
WEST NORTH CENTRAL
SOUTH ATLANTIC
NEW ENGLAND
MIDDLE ATLANTIC*
PACIFIC
EAST NORTH CENTRAL
0
20
40
60
80
100
PERCENT OF EMPLOYEES
UNDER $1550
$1550 AND UNDER $2050
$2050 AND UNDER $2550
$2550 AND OVER
U. S. BUREAU OF LABOR STATISTICS
*EXCLUSIVE OF NEW YORK CITY

small cities. It will be noted from table 2 that the number of employees of police departments per 10,000 inhabitants was considerably greater in the larger cities than in the smaller ones: 28 in New York City and 22 in the other cities with a population of 500,000 or more as against 15, 14, and 13, respectively, in the 3 groups of smaller cities. Similarly, the salary expenditure per capita declined from $8.30 in New York City and $5.29 in other cities of 500,000 or more to $2.41 in the smallest cities.

TABLE 2.—*Municipal Police-Department Employees and Pay-Roll Expenditures in 362 Cities in Relation to Population, July 1, 1938*

Item	Population (Census of 1930)	Number of employees		Annual pay-roll expenditures		
		Total	Per 10,000 of population	Total	Per employee	Per capita
SIZE OF CITY						
All cities[1]	41,500,416	71,147	17	$155,203,334	$2,181	$3.74
500,000 population and over	13,898,096	31,247	22	73,583,046	2,355	5.29
100,000 and under 500,000 population	15,296,212	23,646	15	49,795,034	2,106	3.26
50,000 and under 100,000 population	6,249,317	8,613	14	17,243,916	2,002	2.76
25,000 and under 50,000 population	6,056,791	7,641	13	14,581,338	1,908	2.41
FIVE LARGEST CITIES						
New York City	6,930,446	19,556	28	$57,495,119	$2,940	$8.30
Chicago	3,376,438	6,833	20	17,284,901	2,530	5.12
Philadelphia	1,950,961	4,898	25	10,718,237	2,188	5.49
Detroit	1,568,662	4,007	26	10,548,944	2,633	6.72
Los Angeles	1,238,048	2,771	22	6,577,308	2,374	5.31
REGION						
All regions[1]	41,500,416	71,147	17	$155,203,334	$2,181	$3.74
Middle Atlantic[1]	8,333,840	16,037	19	36,743,208	2,291	4.41
New England	4,363,297	8,519	20	18,004,129	2,113	4.13
Pacific	4,155,503	7,202	17	16,732,624	2,323	4.03
East North Central	12,570,072	20,976	17	48,506,833	2,312	3.86
South Atlantic	3,712,225	6,998	19	14,037,223	2,006	3.78
West North Central	3,482,012	5,265	15	10,314,707	1,959	2.96
Mountain	727,281	919	13	1,803,208	1,962	2.48
West South Central	2,513,210	3,183	13	5,556,622	1,746	2.21
East South Central	1,642,976	2,048	12	3,504,780	1,711	2.13

[1] Figures for New York City not included.

Per capita salary costs in the various regions, shown in the third section of table 2, reveal interesting relationships when compared with average earnings per employee. For example, the East North Central region, which ranked second in average annual earnings per employee, ranked fourth in per capita salary costs, because there were relatively fewer police-department employees per inhabitant in this region than in the Middle Atlantic,[4] New England, or South Atlantic States. The two South Central divisions had the fewest

[4] Exclusive of New York City.

employees per 10,000 inhabitants as well as the lowest salary scales of any of the nine geographic divisions.

The number of police employees in relation to population does not by itself measure the adequacy of police protection. The stream of traffic, as well as the frequency of such unusual events as parades, fairs, and conventions, are among the other factors affecting the size of the police departments.

The control of automobile and pedestrian traffic is an important function of public safety, about a seventh of the patrolmen in New York City and a fifth of all those in the other 361 cities covered by the study being permanently assigned to traffic duty. However, this nucleus of full-time traffic officers was supplemented during periods of peak flow of traffic by patrolmen not normally assigned to the traffic squad.

Working Conditions

Closely related to salaries or pay-roll expenditures is the subject of working conditions. Hours per week on duty, vacations with pay, opportunity for promotion, and uniforms or equipment supplied the policemen, not only are of vital interest to members of the police force, but also affect the quality and the cost of service given to the public.

Hours of duty for policemen throughout the United States varied from continuous duty to as low as 40 hours per week. However, the majority of the force worked 8 hours a day and had a fraction of a day or a full day off each week. Continuous duty is a term used to describe the time on duty required of chiefs who are on call at all hours of the day and night in some of the small- and medium-sized cities. There were only 36 employees on continuous duty in the 362 cities covered by this report. Similarly, there was only a small number who worked as little as 40 hours per week.

More than one-half (56 percent) of all employees in 1938, excluding those in New York City, worked on 8-hour tours, with 1 day off each week. The majority of employees having this 48-hour workweek were in the largest cities, but there were also considerable numbers in the medium- and small-sized cities with the same workweek. Philadelphia, Pittsburgh, Buffalo, Chicago, Detroit, Milwaukee, San Francisco, and Washington, D. C., all had the 8-hour day with 1 day off each week. The New York City police force also worked an 8-hour day with approximately 1 day off each week. Nine percent of all employees were on duty 8 hours a day, but had only 2 days off per month, and 7 percent worked the same number of hours per day, but received no days off except their regular annual vacation. A very small proportion had longer hours.

The majority of police-department employees were given 2 weeks' vacation with pay. The regions in which longer vacations were given

were the South Atlantic and the East North Central. In the South Atlantic region slightly more than a fifth of the police-department employees had 26-day vacation periods; most of the remaining employees received from 14 to 20 days. Approximately one-half of the employees in the East North Central police departments received about 3 weeks' vacation, and fully four-fifths of the members of the New York City department had 19 days' vacation. In only one region, East South Central, were the vacation periods appreciably shorter than 2 weeks. Here, one-half of the employees received 10 days or less.

Practically all of the 362 cities reported definite policies regarding the promotion of patrolmen. In 193 cities patrolmen were advanced automatically from the lowest grade to the next higher grade after 1 year of service. Promotion by civil-service examination was reported by 45 cities. Of the remaining cities, 44 reported automatic promotion after some specified period of service, and an equal number indicated that promotion was by appointment. Thirty-six cities reported that they had only one grade of patrolmen, but in many of these cities promotion took the form of salary increases without an increase in official status.

In many cities, members of the uniformed force were furnished with uniforms and other items of equipment without charge. Full uniforms were supplied by 54 cities and raincoats or capes by 43. The majority of cities furnished some items such as revolvers, handcuffs, and badges.

Foreign Wartime Policies and Labor Conditions

WARTIME ARBITRATION MACHINERY IN AUSTRALIA

UNDER the terms of the Commonwealth Conciliation and Arbitration Act, 1904–34, the Government of Australia established the Court of Conciliation and Arbitration to prevent and settle industrial disputes.[1] The Court's jurisdiction was limited to handling of cases affecting more than one State in the Commonwealth, the individual States having authority over working conditions within their boundaries. For many years the Court has made awards, in industries coming under its jurisdiction, which are binding upon all parties subject to their terms.

Only registered unions may benefit from an award. Workers, covered by an award of the Court, forfeit their right to strike during the life of an award, and in test cases, unions have been stricken from the register because their members participated in strikes illegally. Although the Court may summon parties to a dispute, who are not covered by an award, in order to conciliate their differences informally, arbitration proceedings may be initiated only upon request of an organization, a registrar, a State industrial authority, or a judge who has negotiated in an effort to conciliate in a case. However, when disputes arise in industries already covered by an award, any party to the award may request the Court to make a decision.

Emergency Regulations

Owing to the war emergency, special regulations have been adopted in Australia, conferring additional powers on the Commonwealth Government in settling industrial disputes.[2] This action was taken on December 16, 1940, under the National Security Act 1939–1940. The regulations, known as the National Security (Industrial Peace) Regulations (Statutory Rules, 1940, No. 290), are designed to facilitate the settlement of disputes as well as to prevent them from arising. As long as the regulations are effective they are construed as if their provisions were incorporated (as amendments) in the Commonwealth Conciliation and Arbitration Act, 1904–34.

[1] For details see the Monthly Labor Review, November 1939 (p. 1065).

[2] Data are from report from Henry B. Day, United States consul at Sydney.

Under the regulations it is expected to eliminate delays arising from differences of opinion as to the particular court or commission having jurisdiction in a case. The loss of time in filing papers and serving notices to persons or organizations involved is also reduced.

An important new provision is that the Commonwealth Conciliation and Arbitration Court has jurisdiction in industrial disputes that do not extend beyond the limits of any one State. Such cases were formerly subject to settlement within the several States. The Commonwealth Government was confined to handling disputes of an interstate character.

In addition to settling disputes that were formerly subject to the Court's action under the arbitration law, the Court is empowered under the regulations to take cognizance of all disputes which, in the opinion of the Court, involve the interests of industrial peace and national security or which are so certified by the Minister for Labor and National Service. The Court also is empowered to consider cases referred to it by conciliation commissioners.

Extended powers are granted to the Court to declare a "common rule." In every case of which it has cognizance it may declare, by any award or order, that any particular regulation, rule, custom, term of agreement, condition of employment or dealing, whatsoever, determined by an award in relation to any industrial matter, shall be a common rule of any industry in connection with which the dispute arises, or of such portion of that industry as the Court thinks fit, or of any group of industries of which that industry is one. The Court is not limited to making a decision on the particular matters in dispute and may make an award regulating the whole or such portion of the conditions of employment in relation to the industry in which the dispute exists as the Court thinks fit. However, before declaring a common rule or making an industry award, the Court is obliged to take into account the competitive effects of the decision and give due notice in the Gazette, or such other publications as may be specified by the Court, of the action contemplated.

The Court may make an order interpreting or implementing the application in any industry of any existing law affecting wages, terms, or conditions of employment of any employee or class of employees. However, action may not be inconsistent with that law.

Powers of the Minister for Labor are broadened to allow him to refer matters to the Court that, in his opinion, have led or are likely to lead to industrial unrest. Notwithstanding that an industrial dispute does not exist affecting that matter, the Court may proceed to hear and determine the question in the same manner as if it were an industrial dispute. Organizations and employees are to notify the proper authorities forthwith, if they are aware of any industrial matter that may lead to any interruption of work. The Common-

wealth is obligated to hear and determine the matter in the same manner as though an industrial dispute existed.

In its discretion the Court may exercise any jurisdiction under the act or the regulations in the interest of industrial peace or national security. The Court or a conciliation commissioner may make an order dispensing with the service or filing of any process required by or under the act to be served or filed.

Provision is made for the appointment of additional conciliation commissioners and their powers are enlarged. Where the Minister for Labor is of the opinion that delay may result from handling cases in the prescribed manner, either by the Court or by a conciliation commission, he may direct a conciliation commissioner to hear and determine the industrial dispute at once.

Boards of reference of one or more persons may be appointed by the Court in connection with any industry or part of any industry. This may be done even though no order or award has been made in relation to an industrial dispute. Their powers of investigation and report are subject to the Court's discretion and their decisions have the same validity as an award or order of a conciliation commissioner.

CHANGES IN WORKING CONDITIONS OF BRITISH LABOR IN 1940

UNEMPLOYMENT and strike activity of British workers declined during 1940, and cost of living and wage rates rose, according to a survey for the year made by the Ministry of Labor.[1]

Unemployment

In the first few weeks of 1940 unemployment increased sharply, owing to exceptionally bad weather which hindered outdoor work and caused transport difficulties. With the return of normal weather substantial reductions in unemployment occurred. By the middle of June the number of registered unemployed in Great Britain and Northern Ireland was approximately 834,000—a reduction of over 600,000 compared with December 11, 1939. After some fluctuation in the next 4 months, with a peak of over 900,000 unemployed on October 14, 1940, the total registered declined sharply. On December 9, the number unemployed was approximately 775,000, showing a fall of more than 660,000 from the same month in 1939.

The unemployed registered are shown in table 1, by months from December 1939 to December 1940, inclusive. The tabulation covers unemployment in Great Britain and Northern Ireland. The registra-

[1] Ministry of Labor Gazette (London), January 1941.

tion includes three distinct categories, as follows: (1) Persons registered as wholly unemployed or out of work; (2) persons on short time, or otherwise temporarily suspended from work on the understanding that they are to return shortly; and (3) unemployed casual workers, who normally seek a livelihood by means of jobs of short duration.

TABLE 1.—*Number of Registered Unemployed in Great Britain and Northern Ireland, December 1939 to December 1940*

Date	Number of registered unemployed			Date	Number of registered unemployed		
	Wholly unemployed	Temporarily stopped	Casual workers		Wholly unemployed	Temporarily stopped	Casual workers
1939				*1940*			
Dec. 11	1,244,555	146,318	50,050	May 20	790,956	107,224	49,572
1940				June 17	708,069	86,918	39,227
				July 15	696,658	162,659	39,359
				Aug. 12	670,488	163,362	33,889
Jan. 15	1,296,233	253,992	52,326	Sept. 16	675,642	194,401	33,394
Feb. 12	1,216,759	318,930	50,195	Oct. 14	695,864	178,472	30,144
Mar. 11	1,032,570	112,323	48,366	Nov. 11	665,471	171,210	26,132
Apr. 15	902,295	93,301	44,748	Dec. 9	602,495	148,753	23,674

The reductions among those registered occurred in the groups of wholly unemployed and casual workers, for which registration decreased by more than one-half over the year. For men and boys wholly unemployed the decline in registration was considerably greater than for women and girls in the same category. Temporary stoppages numbered slightly higher in December 1940 than a year earlier. A reduction of 5,000 in the number of men and boys in this group was more than offset by an increase of over 7,000 in the number of women and girls. Few women are included among the unemployed casual workers and the marked decrease for the year in this category affected men almost exclusively.

Long-term unemployment among men was reduced markedly over the year. From a total of 137,000 on January 1, 1939, the number of unemployed men aged 18 to 64 in Great Britain, who had been registered for 12 months or more, fell to about 105,000 on May 20 and 54,000 on November 25.

Wages and Hours

Increases in rates of wages, which began soon after the outbreak of war, continued throughout 1940. They were granted mainly to offset the increase in the cost of living. For persons covered by the Ministry of Labor's statistics it is estimated that the 1940 changes resulted in an aggregate net increase of £2,000,000 in weekly full-time rates of wages of nearly 8,000,000 workers. Of this total 4,750,000 had been granted some increase in wage rates in the last 4 months of 1939. Over the entire war period to the close of 1940, the number

affected is estimated to be 8,000,000 and the full-time weekly increase in rates about £3,000,000. Nearly all the industries for which information is available were affected by the increases in rates of pay.[2]

Similar statistics covering normal weekly hours of labor show that about 145,600 persons had their working time changed. Of this number 144,400 had their weekly hours reduced by 4¼ a week, on the average; 1,200 had theirs increased by about one-half hour weekly. The largest group affected consisted of juvenile workers under 16 years of age. Their hours were shortened to a maximum of 44 a week as of January 1, 1940, under the provisions of the Young Persons (Employment) Act of 1938. No information is given on the extent of overtime work.

Cost of Living

The cost-of-living index, based upon July 1914 as 100, was 174 on January 1, 1940, as compared with 155 on September 1, 1939. A further gain occurred from January 1 to March 1, 1940, the index for the latter date being 179. The index declined from 187 on July 1 to 185 on August 1, but rose steadily in the succeeding months to 196 on January 1, 1941. The rise of 22 points during the year was equivalent to nearly 13 percent. Index numbers for the five groups of items and for all items included in the series are shown in table 2, for September 1939, the 12 months of 1940, and January 1941. About 2½ points in the 22-point rise in cost of living resulted from the sales tax that became effective on October 21.

Prices of beef, mutton, bacon, margarine, and tea changed little in 1940 and the prices of bread and butter were practically stationary. Milk, eggs, and potatoes varied seasonally and rose considerably over the year. Flour showed a slight decline. Fish showed a marked rise, with some exceptions. Maximum retail prices fixed by order of the Minister of Food were in force at the beginning of 1940 on imported meat, tea, sugar, butter, imported eggs, potatoes, herrings, bloaters, and kippers. Orders controlling prices went into effect in 1940 on bacon, meat, home-produced and imported milk, home-produced eggs, cheese, and imported cod fillets. Prices of tea were decontrolled and again restricted in the course of the year.

Rents of working-class dwellings were subject to control, under the Rent Restrictions Acts, during 1940. They showed an average increase during the year of only about 1 percent, wholly due to rises in local taxes in some districts.

Workers' clothing prices increased considerably over the year. Retail prices of coal averaged about 10 percent higher at the beginning of 1941 than a year earlier. Lamp oil rose 15 percent; candles (cheap wax), 26 percent; and matches, 60 percent. Tobacco and cigarettes averaged 32 percent higher. The increase for railway fares was about

[2] For changes in earnings see the Monthly Labor Review for February and March 1941.

10 percent. For domestic ironmongery, brushware, and pottery the rise averaged about 21 percent. Soap advanced 12 percent.

TABLE 2.—*Index Numbers of Cost of Living, September 1939, 1940, and January 1, 1941*

[July 1914=100]

Date	Food	Rent (including taxes)	Clothing	Fuel and light	Other items included	All items included
1939						
Sept. 1	138	162	208	182	179	155
1940						
Jan. 1	157	162	250	201	190	174
Feb. 1	161	162	260	202	190	177
Mar. 1	161	162	265–270	205	193	179
Apr. 1	158	162	270–275	205	193	178
May 1	159	164	280	208	210	180
June 1	158	164	285	212	210	181
July 1	168	164	290	212	210	187
Aug. 1	164	164	290	212	219	185
Aug. 31	166	164	295	212	219	187
Oct. 1	169	164	300	214	219	189
Nov. 1	172	164	305–310	215	220	192
Nov. 30	173	164	320	219	221	195
1941						
Jan. 1	172	164	330	223	222	196

Industrial Disputes

Disputes involving stoppages of work that were reported as begun in 1940 in Great Britain and Northern Ireland numbered 914, as compared with 940 in the preceding year. The number of workers directly involved was 226,700 and indirectly, 73,500; in 3 disputes beginning in 1939 and continuing into 1940, about 300 additional workers were involved both directly and indirectly. Thus, the total was about 300,500 in 1940, compared with 337,300 in 1939. In the establishments where disputes were reported the aggregate time lost in 1940, owing to disputes, was 941,000 working days. This is the smallest total recorded in any year for which comparable statistics are available—that is, for nearly a half century. The figure of 960,000 for 1934 was slightly greater. Disputes in the coal-mining industry accounted for more than two-fifths of the total number of strikes and over three-fifths of the workers involved in both 1939 and 1940. Most of these stoppages involved individual mines. Only two disputes beginning in 1940 involved more than 5,000 workers. Both were coal-mine stoppages, one of which involved 26,000 workers and the other 20,000 workers, with a total loss of about 130,000 working days. Statistics of labor disputes are shown in table 3, by years, from 1930 to 1940. Workers are counted in the totals as many times as they were involved in a dispute in any year, resulting duplications being confined mainly to the coal industry.

TABLE 3.—*Trend of Labor Disputes in Great Britain and Northern Ireland, 1930 to 1940*

Year	Number of disputes beginning in year	Number of workers involved			Approximate duration in working days [1]
		Directly	Indirectly	Total	
1930	422	286,000	21,000	307,000	4,400,000
1931	420	424,000	66,000	490,000	6,980,000
1932	389	337,000	42,000	379,000	6,490,000
1933	357	114,000	22,000	136,000	1,070,000
1934	471	109,000	25,000	134,000	960,000
1935	553	230,000	41,000	271,000	1,960,000
1936	818	241,000	75,000	316,000	1,830,000
1937	1,129	388,000	209,000	597,000	3,410,000
1938	875	211,000	63,000	274,000	1,330,000
1939	940	246,000	91,000	337,000	1,360,000
1940	914	227,000	73,000	300,000	940,000

[1] To nearest 10,000.

BRITISH WARTIME NUTRITION POLICIES

THE British social services are an integral part of the national wartime effort of that country. As the war proceeds, these services are being improved and extended and new ones are being developed. One phase of the work is the development of a national nutrition policy.[1]

Prior to the war the most important step in this direction was the "milk in schools" scheme under which almost three million children were receiving milk daily at a half-penny for a third of a pint. Children of necessitous parents were being provided with specially nourishing food, and under this scheme about 600,000 children were receiving free milk and another 180,000, free meals. Other meals were provided for those who could pay. In some instances school authorities were providing children with cod-liver oil and other additions to their diet, free or at cost price or less. Most of the maternity and child-welfare clinics were providing milk (dry or fresh), free or at reduced prices, to expectant or nursing mothers and to children who were not in school. In England alone, 7,800,000 gallons of milk were distributed in this way in 1938. Many other similar experiments were being carried out by voluntary bodies and local authorities throughout the country.

The problem became more urgent when war broke out, since supplies had to be conserved, and as a result a scientific food policy for the whole population is being evolved. The equitable distribution and prevention of waste of important foodstuffs, such as butter, sugar, and meat, is obtained through rationing. The Government is incurring a loss of about £80,000,000 annually in keeping down the prices of important foods such as bread, flour, bacon, ham, milk, and cheese, and a subsidy is being paid amounting to ½d. on a 4-pound loaf of

[1] Britain's Social Services in Wartime. New York, British Library of Information, 50 Rockefeller Plaza [1941?].

bread selling for 8d. or less. These figures do not include the cost of the national milk scheme, under which all expectant and nursing mothers and children under 5 years of age can obtain 1 pint per day at 2d. per pint—or free if the combined incomes of father and mother do not exceed 40s. per week plus 6s. for each dependent. The regular price of milk has been increased to 4½d. a pint. About 2,500,000 persons are benefiting under this plan, which is additional to the "milk in schools" scheme. About 30 percent of these persons are receiving milk free. The cost, it is calculated, will amount to about £14,000,000 a year.

"Marcon," a new manufacturing and wholesale organization, has been formed for the marketing of margarine. It has reduced distributive costs by confining production of margarine to two grades, each containing vitamins A and D up to the standard of butter. White flour is fortified also with vitamin B_1 and calcium salt. A scientific adviser has been appointed to the Ministry of Food, and a scientific food committee advises the Food Policy Committee of the Cabinet.

Communal Feeding

Increased Government grants, up to 90 percent of the cost of the school-meals schemes, have been offered to the local authorities by the Board of Education and the Department of Education for Scotland. Local education authorities, the Women's Volunteer Services, and other bodies have been cooperating to provide communal meals in reception areas to take the strain off households with evacuated children; and local authorities are also providing canteens and communal meals for A. R. P. workers and for the Auxiliary Fire Service.

There are 150 community feeding centers in the London County Council area, many of which, known as the Londoners' Meals Service Restaurants, have been established by the Ministry of Food in collaboration with the London County Council; and there are others outside the London area. The meals in London generally cost 4d. to 6d. for a meat dish, 2d. to 3d. for a second course, and 1d. for a cup of tea; children's portions sell for half price. Hot meals obtained from these centers can be taken home to eat. These eating places, in addition to furnishing a useful community service, are of great value in cases where enemy action has damaged gas, water, or electricity supplies.

Rest centers, which provide food, shelter, and other assistance, have been provided for persons who have been bombed out of their homes.

Food is provided in air-raid shelters through the Ministry of Food with the assistance of the local authorities. Of 1,700 large shelters in 58 London boroughs, over 1,000 now have regular arrangements enabling them to feed over 200,000 persons each night, while in the 71

tube stations which have been equipped as shelters, the London Passenger Transport Board is feeding 12,000 nightly. In order that workers shall not have to go to work without breakfast, the Ministry of Food is collaborating with retailers and voluntary societies, especially coffee-stall holders, to provide them with food.

Provisions for communal feeding in factories are being extended by the Minister of Labor in cooperation with the Minister of Food. The ability to secure food in the factory canteens relieves the strain of long shifts and night shifts and takes from the housewife some of the burden of providing meals at all times of the day and night for those on different shifts.

ECONOMIC DEVELOPMENTS IN CANADA IN 1940 [1]

ECONOMIC activities have continued to expand with the greater utilization of Canada's resources in the production of essential war materials. The emphasis on such production up to the present time has been placed for the most part on nonagricultural products, such as the direct implements and munitions of war. As a consequence, the war stimulus has been reflected most strikingly in the nonagricultural industries. At the same time, however, the widespread increase in business activity and employment has brought about an improved domestic demand for farm products, and these products which are produced for the home market have reflected this greater demand by an expanded volume of sales and some advance in prices.

Increases are shown in all important branches of industry, but the most notable advances are reported for the iron and steel industries. Construction also made very important gains in 1940, mainly because of the construction of military camps and other buildings for war purposes. Much activity is reported in forestry operations, especially in the production of newsprint.

Employment has risen to levels never before attained, and shortages, especially of skilled laborers, were shown in certain lines at the end of 1940. With a continuing rise in the volume of employment, as well as a further increase in the armed forces, a definite labor shortage in 1941 seems probable.

Some advances in wage rates, combined with increased employment, have had the effect of increasing the purchasing power of city workers and also of enlarging the consumption of certain agricultural products, particularly meats, dairy products, vegetables, and fruits.

In 1940, prices in general in Canada showed comparatively little increase. The wholesale index of all commodities was approximately 83 (1936=100) at the beginning of the year and was only about 2

[1] Data are from Canada, Department of Agriculture, Economics Division, The Economic Annalist (Ottawa), February 1941.

points higher at the end of 1940. The cost-of-living index also showed only a minor advance over the year period.

The following table gives the annual indexes for wholesale and retail prices and wage rates from 1913 to 1940, and for production from 1919 to 1940. Monthly index numbers in 1940 for most of these items are also included.

Annual and Monthly Index Numbers of Wholesale Prices, Living Costs, Production, and Wages in Canada

Year	Wholesale prices (1926=100)				Retail prices		Production and wages (1926=100)		
	All commodities	Farm products [1]	Field products [2]	Animal products [3]	Urban living costs (1935–1939=100)	Farm living costs (1926=100)	Physical volume of business [4]	Industrial production [4]	Industrial wage rates
1913	64.0	62.6	56.4	77.0	79.7	66.0			53.7
1914	65.5	69.2	64.9	79.0	80.0	68.2			54.4
1915	70.4	77.7	76.9	79.2	81.6	72.1			54.8
1916	84.3	89.7	88.4	92.3	88.3	78.0			58.8
1917	114.3	130.0	134.3	119.6	104.5	94.3			67.4
1918	127.4	132.9	132.0	134.7	118.3	111.1			78.0
1919	134.0	145.5	142.4	152.5	130.0	120.3	71.3	65.5	93.1
1920	155.9	161.6	166.5	149.9	150.5	144.5	75.0	69.9	111.5
1921	110.0	102.8	100.3	108.5	132.5	116.2	66.5	60.4	101.9
1922	97.3	86.7	81.3	99.1	121.3	104.6	79.1	76.9	96.7
1923	98.0	79.8	73.3	95.1	121.7	105.2	85.5	83.8	98.9
1924	99.4	87.0	82.6	97.2	119.5	103.0	84.6	82.4	100.1
1925	102.6	100.4	98.1	105.7	120.6	102.2	90.9	89.7	99.4
1926	100.0	100.0	100.0	100.0	121.8	100.0	100.0	100.0	100.0
1927	97.7	102.1	99.9	105.7	119.9	99.2	106.1	105.6	102.2
1928	96.4	100.7	92.6	114.3	120.5	98.1	117.3	117.8	103.2
1929	95.6	100.8	93.8	112.5	121.7	97.5	125.5	127.4	105.2
1930	86.6	82.3	70.0	102.9	120.8	94.3	109.5	108.0	105.8
1931	72.2	56.3	43.6	77.6	109.1	86.4	93.5	90.4	101.5
1932	66.7	48.4	41.1	60.7	99.0	81.0	78.7	74.0	95.4
1933	67.1	51.0	45.8	59.7	94.4	79.4	79.7	76.8	90.3
1934	71.6	59.0	53.8	67.7	95.7	80.9	94.2	93.6	91.5
1935	72.1	63.5	57.3	74.0	96.2	81.2	102.4	103.3	94.1
1936	74.6	69.4	65.8	75.3	98.1	81.4	112.3	114.4	95.9
1937	84.5	84.5	85.7	84.9	101.2	84.5	122.8	120.8	102.9
1938	78.6	73.6	69.0	81.3	102.2	84.0	112.9	114.6	106.0
1939	75.4	64.3	54.2	81.2	101.5	81.5	122.4	125.6	106.4
1940	82.9	67.1	55.9	85.8	105.6	88.2	145.4	156.1	109.6
1940									
January	82.6	70.0	60.8	85.5	103.8		138.6	145.2	
February	82.8	70.3	61.5	85.0	103.8		131.2	136.2	
March	83.2	71.3	63.1	84.9	104.6		123.0	127.0	
April	83.1	72.1	64.9	84.1	104.6	87.2	151.0	159.8	
May	82.1	68.0	58.2	84.3	104.9		140.6	146.9	
June	81.6	64.3	52.9	83.5	104.9		141.3	147.6	
July	82.4	64.6	53.0	83.9	105.6		144.5	151.1	
August	82.7	62.7	50.4	83.3	105.9	89.2	152.5	161.6	
September	83.1	63.8	50.7	85.8	106.4		155.4	167.0	
October	83.3	64.6	51.1	87.3	107.0		156.7	168.2	
November	84.0	66.9	52.5	91.0	107.8		157.4	168.8	
December	84.2	67.1	52.5	91.6	108.0		152.5	159.5	

[1] Wholesale prices of Canadian products of farm origin only.
[2] Wholesale prices of grain, fruits, and vegetables.
[3] Wholesale prices of animals and animal products.
[4] Yearly index numbers for 1940, subject to revision.

New Records in Mineral Output [2]

In 1940 the value of Canada's mineral production exceeded $500,000,000, the Department of Mines and Resources reports. This amount breaks all previous records, even the peak values of 1939 and 1937, which were, respectively, $474,602,000 and $457,359,000. In 1915, the second year of the World War, the total value of the mineral production was only $137,000,000.

The 1940 estimated value of the gold output reached an all-time high considerably above $200,000,000, which was $16,000,000 more than the 1939 figure. By far the largest part of the Canadian gold output is exported, mainly to the United States, and the expansion in production "largely reflects the policy of the mines to produce the metal at a rate as high as sound mining practices will allow in order to provide foreign exchange for the purchase of war materials."

The copper, nickel, lead, and zinc output in 1940 was above that of the preceding year. As a producer of copper, nickel, lead, and zinc, Canada holds a highly advantageous world position, ranking first in the output of nickel, second in zinc, third in copper, and fourth in lead. Besides meeting the growing demands of wartime industries within its own borders, enormous tonnages of the Dominion's base metals are being shipped to the United Kingdom.

Among other minerals the Dominion produces in great quantities are silver, platinum, asbestos, gypsum, coal, salt, and petroleum.

JOINT CONTROL IN CANADIAN CONSTRUCTION INDUSTRY [3]

AS AN outcome of the second national joint conference of employers and employees in the Canadian building and construction industry, held at Ottawa, February 10–12, 1941, under the auspices of the National Labor Supply Council, the National Joint Conference Board of the Building and Construction Industry has been organized. This body, composed of nine representatives each of employers and employees, will carry forward the work of the conference and function as a consultation medium in matters relating to the participation of the construction industry in national war activities.

Among the measures of control decided upon are the following:

The "National Board shall proceed immediately to establish zones throughout the Dominion, and assist local organizations to set up zone committees, composed of two representatives for each group."

When, for speedier war production, it may be necessary to suspend for a time working conditions provided by law or agreement or estab-

[2] Industrial Canada (Toronto), February 1941.

[3] Canadian Labor Gazette (Ottawa), February 1941.

lished by usage as clause 10, P. C. 2685 contemplates, "Government departments, contractors, owners, or architects shall submit a request for such suspension to these zone committees." On receipt of such a request the zone committee shall at once examine the necessity for the extension of hours, also the question of extra shifts or calls to other localities for additional workers, and such other measures as may seem advisable, and shall report their findings without delay to the parties interested with a view to their mutual agreement.

Since wage levels in effect throughout the industry at the outbreak of war were generally accepted as fair and equitable—it is agreed that adjustments in wage rates from that time forward, and until the conclusion of the war, shall be based upon increases in the cost of living; provided, however, that where it can be established that wage rates in any locality were unduly low, provision shall first be made for an appropriate adjustment of rates by negotiation.

To avert stoppages of work, the conference recommends wider use of collective agreements in organized districts and the inclusion of a provision for arbitration in all of these agreements.

Jurisdictional disputes are to be adjusted by machinery already established for this purpose by the interested organizations, but no cessation of work shall occur on war projects during such disputes.

Labor Supply on War Projects

It is recommended by the Joint Conference that the last two paragraphs of Order-in-Council 2685 of June 20, 1940, as follows, be used as a basis for hiring construction labor.

The [coordinating] committee further advise that the attention of employers in meeting their requirements as to labor supply be drawn to the available facilities of the local offices of the Employment Service of Canada in all of the Provinces, where thousands of skilled and semiskilled workers whose training and experience qualify them for war work and employment in industry generally have already been registered, and that advantage be taken of this service to the fullest possible extent.

Many employers have established contacts with trade-unions in meeting their requirements as to labor supply, and the Minister of Labor is of opinion that the more general adoption of this practice would assist in the avoidance of unnecessary labor shortage.

The Joint Conference suggests that the Canadian Employment Service should not only exercise care in classifying skilled tradesmen but also check their qualifications for the trade.

Post-War Planning and Rehabilitation

One of the pressing and principal problems is to formulate an adequate plan for dealing with conditions which must develop in the building industry upon the completion of the great wartime construction program, when jobs will have to be found for building-trades workers.

Provisions will have to be made not only for demobilized men from the armed forces but also for those who have been engaged in the war industries.

In the judgment of the Conference, a definite and well-prepared scheme for post-war social and economic adjustment should be at once undertaken. As means of approach to meet the responsibilities which will arise at the close of the war, the Joint Conference submits the following:

1. Extension of the present Federal Housing Act and the broadening of its provisions to include opportunities for those in business to secure the same measures of assistance as other citizens.
2. Reinauguration of the Home Improvement Plan and the broadening of this measure to include opportunities for small business men to secure assistance for necessary extensions.
3. A slum-clearance program and development of modern housing and town-planning schemes, landscaping, and garden home plans, with playground and park improvements.
4. Large-scale development for the utilization of water power for the creation of electrical energy compatible with increased demands and modern development.
5. Reforestation.
6. Continuation and extension of the Prairie Farm Rehabilitation Scheme.
7. Highway development, to be progressively continued, that access may be provided to the national scenic beauties of Canada with the object of encouraging tourist traffic now recognized to be an important national asset.
8. Diversion and conservation of waters for a greater use of our lakes and rivers as a means of pure water supply.
9. Construction of sewage-disposal plants for preventing the contamination of our lakes and rivers.
10. In the interests of health and sanitation, provisions should be made to meet the requirements of numerous municipalities in Canada which lack the facilities of procuring a fresh water supply and proper disposal of sewage.
11. Extension to farmers of the advantages of science by the installation of modern methods of sanitation and electrical energy.
12. Grade-crossing elimination.
13. In cooperation with provincial and municipal authorities, undertake a survey of possible requirements of public buildings and schools and the establishment of a system of modernization.
14. * * * the extensive development of a system of public baths and swimming pools and other recreation facilities.

The Joint Conference also recommends that the Federal Government establish the requisite machinery for carrying out this plan and suggests in this connection the creation of a new department of the Government, which should consult with the National Joint Conference Board of the Building and Construction Industry in the development of any plan.

Apprenticeship and Training

Referring to the present strong realization of "the mistake of not making more definite efforts to carry on any established method of the training of youth to meet the requirements of industry," the Joint

Conference declares that the intensified training by brief mechanical courses for a few months is undesirable, as such forced measures do not permit of basic instruction in the building trades and will lead to grave economic problems. Quick training of this kind will not make competent craftsmen.

A new consciousness is apparent among the leaders of industry of the desirability of intensifying our efforts to overcome the present emergent methods by again attempting to have properly qualified systems of apprenticeship put into operation.

The Conference requests the Dominion Government to promote technical education and endorses the principles of the Apprenticeship Act of the Province of Ontario, which, if properly enforced and extended to other Provinces, "would provide a sound foundation for meeting the future requirements of trained, skilled workers in our industry."

Industrial Relations

OVERTIME PROVISIONS IN UNION AGREEMENTS IN CERTAIN DEFENSE INDUSTRIES [1]

PROTECTION of hours standards by the requirement of a higher-than-regular rate of pay for overtime and holiday work has been a traditional policy with organized labor. Overtime rates are included in virtually all of the union agreements now in effect. In industries where work is not regularly scheduled on a 7-day basis, most agreements also provide penalty rates for Saturday and Sunday work as well as for holidays. Overtime provisions in the union agreements for the industries closely related to defense activities are not unlike those in other agreements.

The most common overtime rate is time and a half the regular rate, although some agreements require double time. In some instances a graduated scale is provided; for example, time and a half for a specified number of hours of overtime and double time thereafter. In some cases certain groups of employees, such as maintenance workers, are excluded from overtime payments. In a few, overtime rates are waived for a given number of weeks during busy seasons.

Outside of continuous-process and maintenance work, higher rates of pay are usually provided for Sunday and holiday work. The most common is time and a half, although a substantial number provide double time, and a few triple time, for certain holidays.

In order to protect the 5-day week, a majority of all agreements call for time and a half for work done on Saturday, even though such Saturday work may not involve working beyond the full-time weekly hours. A few agreements, however, permit Saturday work at regular pay when time has been lost during the week because of holidays, weather conditions, machine break-downs, etc. Continuous-process and maintenance workers are usually excluded from Saturday penalty rates.

This article presents an analysis of the overtime provisions in the union agreements in the files of the Bureau of Labor Statistics for the following industries: Aircraft, aluminum, automobile, electrical equipment, iron and steel, machine tools, metal mining, rubber, and shipbuilding. All of these are current agreements, although some of them were negotiated before October 24, 1940, when the 40-hour

[1] Prepared in the Bureau's Industrial Relations Division, under the direction of Florence Peterson, chief.

week provisions of the Fair Labor Standards Act went into effect. This legal maximum, of course, supersedes any of the union-agreement provisions in interstate industries which allow more than 40 hours at regular rates, or overtime rates of less than time and a half. Such cases, however, are few.

Aircraft Manufacture

Nearly one-third of the employees engaged in the manufacture of aircraft and parts are covered by union agreements. The principal unions in the industry are the International Association of Machinists, A. F. of L., and the United Automobile Workers of America, C. I. O.

Among the agreements negotiated by locals of the International Association of Machinists are those with the Beech Aircraft Corporation, Wichita, Kans.; the Boeing Aircraft Co., Seattle, Wash.; the Consolidated Aircraft Corporation, San Diego, Calif.; and the Lockheed Aircraft Corporation and the Vega Airplane Co., both in Burbank, Calif. Among the agreements negotiated by locals of the United Automobile Workers, C. I. O., are those negotiated with the following companies: the Bell Aircraft Corporation, Buffalo, N. Y.; the Brewster Aeronautical Corporation, Long Island City, N. Y.; the Bendix Products Division of the Bendix Aviation Corporation, South Bend, Ind.; and Vultee Aircraft, Downey, Calif.

Under all of the agreements on file with the Bureau of Labor Statistics, time and a half is paid for work in excess of 8 hours a day and 40 hours per week.

Most of the workers under agreement are paid time and a half for work on Saturday, unless such work is part of the regular working schedule. According to specific provisions in agreements covering about half of the workers under agreement, the maintenance employees, watchmen, firemen, and janitors, do not receive the penalty rate for Saturday work. For example, one agreement, which covers more than 5,000 employees, provides that there may be a maintenance crew whose regular workweek shall run from Wednesday through Sunday. A small proportion of the workers may work Saturday at regular rates if a holiday occurs in the same week, or if the workers concerned were absent during the week voluntarily or because of sickness.

More than two-fifths of the workers covered by agreement receive double time for work on Sunday, if such work is not included in their regular schedule. Continuous 7-day operations are necessarily excepted.

Nearly three-fourths of the workers under agreement are paid double time for work on recognized holidays. Powerhouse and boiler-room employees and maintenance workers are excepted in some of the agreements.

Aluminum Industry

Approximately two-thirds of the workers in the aluminum industry are covered by union agreements. The principal unions are the Aluminum Workers of America, C. I. O., and the Aluminum Workers Council, coordinating the directly affiliated federal labor unions of the A. F. of L. Other unions, covering a smaller proportion of workers, are the National Association of Die Casting Workers, C. I. O., and several A. F. of L. craft unions. The Aluminum Co. of America, the predominant company in this field, has signed a joint agreement with the Aluminum Workers of America and the Die Casting Workers, which includes six plants of the company, and an agreement with federal labor unions covering two additional plants. The Reynolds Metals Co., another important company, has negotiated with federal labor unions and locals of skilled craftsmen an agreement covering all its plants.

All but one agreement on file in the Bureau of Labor Statistics provide for an 8-hour day and a 40-hour week. One specifies a 42-hour week, but states that work over 40 hours is optional with the employees.

In all the agreements time and a half is paid for all work in excess of the regular working hours. The Aluminum Co. agreements exempt from the overtime rate persons engaged in continuous-process and other specialized operations. A Die Casting agreement exempts employees in plant maintenance, mold work, and heat treating, from the overtime payment. One small plant limits the amount of overtime which may be worked to 2 hours per day and 8 hours per week. In the Reynolds agreement, double time is paid to printing pressmen and machinists for overtime work in excess of 4 hours, while electricians receive double time for overtime work after midnight.

On the whole, time and a half is paid for all Saturday work, except to workers on continuous-process, maintenance, or shipping jobs. One agreement permits employees to work at regular rates on Saturday to make up time lost during the week from illness, slack work, and holidays, and another permits make-up work on Saturday if the plant is shut down on a weekday, owing to causes beyond the company's control. The Reynolds agreement stipulates time and a half for the first 4 hours on Saturday, and double time thereafter, for printing pressmen, electricians, and machinists. For printing pressmen, if the amount of work performed during the week is less than 40 hours, for causes other than the occurrence of a holiday during the week, straight time must be paid for the first 4 hours on Saturday, time and a half for the next 4 hours, and thereafter double time.

About 15 percent of the workers covered by agreements, including Reynolds employees, receive double rates for work on Sunday and

holidays. Printing pressmen at the Reynolds plants receive triple pay for overtime on Sunday. Time and a half is provided in the other agreements, including those of the Aluminum Co. Exemption from the penalty rates for Sunday and holiday work is usually provided for workers engaged in continuous operations, heat treating, manufacturing new molds, and maintenance work.

Automobile Industry

About three-fourths of the workers engaged in the manufacture of automobiles, including bodies and parts, are working under the terms of union agreements. The principal union in the industry is the United Automobile Workers of America, C. I. O. The United Automobile Workers of America, A. F. of L., has negotiated some agreements. Nine agreements on file with the Bureau of Labor Statistics cover the General Motors, Chrysler, Briggs, Hudson, Nash, Packard, Reo, Studebaker, and White companies.

An 8-hour day and 40-hour week is established by each of the agreements, with time and a half for overtime. A few exceptions are permitted in some. The Briggs agreement provides that all hourly rated employees, such as tool crib men and truck drivers, whose duties are such that they are required to work at hours when production is not going on, shall be paid time and a half for all work over 9 hours in any one day and 40 in any week. Under the Nash agreement, the overtime provisions do not apply for the first 15 working days at the beginning of a new model.

Work on Saturday which is not regularly scheduled is compensated for at time and a half under all the agreements. Under the Chrysler and General Motors agreements, time and a half is also paid for scheduled Saturday work in a week in which a holiday occurs. Most of the agreements do not specify the operations which may be regularly scheduled on Saturday. The Hudson agreement, however, specifically permits Saturday work for the powerhouse, maintenance emergency shifts, heat treaters, oven cleaners, and oven tenders. The Briggs agreement provides that powerhouse employees and helpers and first-aid employees shall not be paid overtime for Saturday work. The Nash agreement similarly excepts powerhouse employees and watchmen.

The General Motors agreement prohibits the practice of laying off an employee after his working week starts and then calling him back to work on Saturday, for the purpose of avoiding penalty payment on Saturday. However, if a plant operates on Saturday because of a break-down, shortage of material, or other interruptions beyond the control of the management, during the week, the penalty rate does not apply unless a holiday occurred in the week. The Packard agreement also provides that regular rates shall apply if a majority of the plant

is operated on Saturday because of lost time during the week, beyond the control of the company.

The Reo agreement provides that the Saturday penalty "may be waived from time to time in whole or in part, in which case the regular rate of pay shall prevail."

Double time is generally paid only for Sunday work not regularly scheduled. Thus, powerhouse employees and watchmen, as well as those employed on continuous operations, are excepted from the double-time provision for Sunday. Under the Reo agreement penalty rates for Sunday work may be waived in the same manner as for work on Saturday.

All of the agreements except that of Studebaker require that double time be paid for work on recognized holidays. The Studebaker agreement provides for time and a half. Exceptions to the holiday rate are common for continuous-operation and maintenance workers. Under the Packard agreement, for example, maintenance employees receive time and a half for holiday work. Likewise, the Reo agreement provides that the holiday penalty rate may be waived in the same manner as for work on Saturday and Sunday.

Electrical-Equipment Industry

Nearly three-fourths of the workers in the electrical-equipment industry are under union agreement. The majority of the covered employees, including those in General Electric, R. C. A. Manufacturing, and Philco, are represented by the United Electrical Radio and Machine Workers Union of the C. I. O. A smaller proportion, distributed among more than 300 companies (mainly in the New York lighting-equipment industry), are represented by the International Brotherhood of Electrical Workers of the A. F. of L. Some skilled craftsmen are also represented by the International Association of Machinists, the Patternmakers League of North America, and other A. F. of L. craft unions.

The 8-hour day and 40-hour week are practically universal in the industry. Among the agreements examined, only one provides for a standard workweek shorter than 40 hours and that is for alternate weeks. One agreement provides for a 9-hour day, with a 40-hour weekly maximum. Over 90 percent of the agreements specify that the work week shall run from Monday through Friday. In the remainder, the regular work schedules may include all or part of Saturday. One agreement contains a clause allowing Saturday work to be regularly scheduled when the normal force is increased by approximately 10 percent. Another establishes Saturday as a regular workday only when two or three shifts are working. In about one-tenth of the con-

tracts, certain classes of employees, such as watchmen, janitors, office employees, maintenance men, firemen, and men on continuous operations, are excepted from the regular hour schedules. In a few cases, a workweek longer than 40 hours is established for these employees, but generally the provision is either that they may work longer hours in any one day or that they may work any 5 days in the week.

Time and a half is the customary rate for overtime and for work outside of the regular shift hours. In a small number of cases, double time must be paid after the first 3 or 4 hours of overtime. A few agreements also provide for the double rate when more than 10 hours' overtime is worked in a week. In one minor agreement the workweek may be lengthened to 45 hours without the payment of overtime until 2,000 hours per employee have been worked during the year.

Time and a half is the usual rate for Saturday when that day is not part of the regular schedule. There are some exceptions, however. In several cases, if a holiday falls during the week, it may be made up on Saturday at straight time. In a few other cases, work on Saturday necessitated by an emergency is permitted at the straight rate. In one agreement, maintenance men and electricians are granted 5 hours' pay for 4 hours' work on Saturday morning, and time and a half for Saturday afternoon. In a few instances, double time is provided for work on Saturday afternoon or after 8 hours of work on Saturday.

Work on Sundays and holidays is prohibited in only a few instances but more than three-fourths of the agreements require the payment of double time if work is necessary on these days. Most of the others require time and a half. In one agreement, two and a half times the regular rate is paid for holiday work, while in a few cases work on certain holidays is compensated at time and a half and on other holidays at double time. In general, maintenance men, engineers, firemen, and watchmen receive a straight rate if they are regularly assigned to Sunday and holiday work. Under a few agreements they receive time and a half when the production workers receive the double rate.

Iron and Steel Industry

In the basic iron and steel industry more than two-thirds of the workers are covered by agreements of the Steel Workers Organizing Committee, C. I. O. Only about half of the fabricating employees are under agreement, mainly with the S. W. O. C., but also with the International Association of Machinists, A. F. of L., the International Molders Union of North America, A. F. of L., the United Automobile Workers, C. I. O., and the United Electrical, Radio and Machine Workers Union, C. I. O. Among the companies organized by the S. W. O. C. are the subsidiaries of the United States Steel Corporation, the Jones & Laughlin Steel Corporation, the Crucible Steel Co. of America, the American Can Co., the Allegheny Ludlum Steel Corpora-

tion, the Timken Roller Bearing Co., the Wheeling Steel Corporation, and others.

Most of the agreements call for the 8-hour day and the 40-hour week, with the payment of time and a half for all overtime work. Variations, confined chiefly to smaller plants, include some providing for slightly longer workweeks and a few for shorter weeks. In a few agreements, maintenance workers have a weekly schedule above 40 hours, although production workers are on a 40-hour schedule. Although only a few agreements require the payment of double time for all overtime, a considerable number require double time after 2 or 4 hours of overtime in any one day. In one the company is allowed 5 hours' leeway in any week without the payment of overtime.

Penalty payments for Saturday, Sunday, and holiday work are common in the fabricating branch of the industry but rare in basic iron and steel. The difference is due chiefly to the fact that the manufacture of iron and steel requires a great deal of continuous operation, while the fabrication of steel products is not continuous, and week-end and holiday operations are therefore not essential for normal production. More than a third of the fabricating agreements require time and a half pay for Saturday work. In a few, Saturday work may be paid for at straight time, if scheduled in order to make up a holiday occurring during 1 week. In some agreements, straight time is also permitted on Saturday for necessary shipping and maintenance work.

For work on Sundays and holidays, nearly half of the fabricating agreements establish the double-time rate, while the others provide time and a half. In about one-third of these cases, regularly assigned employees such as firemen and watchmen are specifically excluded from these provisions.

Machine-Tool Industry

About one-third of the wage earners in the machine-tool industry are under union agreement. Among the unions which have negotiated agreements in this industry are the International Association of Machinists, the Pattern Makers' League of North America, and the United Automobile Workers of the A. F. of L.; the Steel Workers' Organizing Committee, the United Electrical, Radio & Machine Workers' Union, and the United Automobile Workers of the C. I. O.; and the Mechanics Educational Society of America and the Society of Tool and Die Craftsmen, which are not affiliated with either the A. F. of L. or the C. I. O.

The 8-hour day and the 40-hour week prevail under these agreements. Generally, however, certain classes of workers, such as maintenance men, firemen, truck drivers, and watchmen, are either excluded from the jurisdiction of the agreement or specifically excepted from the regular hour provisions. For example, one agreement sets a

9-hour day and 42-hour week for truck drivers, and another a 42-hour week for maintenance men and truck drivers; a third provides a 40-hour week for truck drivers, but no daily maximum.

More than two-thirds of the agreements establish a regular workweek from Monday through Friday. A few others prohibit the starting of the workweek on Sunday. In one case, it is specified that the schedule for watchmen, firemen, engineers, chauffeurs, truckers, and maintenance men may include any of the 7 days of the week.

Time and a half is the customary rate for all overtime work. One agreement allows work on Sunday or holidays only after discussion between management and the union shop committee, while another prohibits work entirely for 1 day out of 7. In still another, the company promises to keep overtime to a minimum and to explain the reasons to the employees affected when it is necessary. A few agreements apply the double-time rate after from 2 to 4 hours of overtime work in any one day.

Time and a half is also the usual penalty rate for Saturday work in those agreements which define the workweek as Monday through Friday. A third of the agreements make no specific mention of Saturday work. One agreement requires double pay for any work on Saturday afternoon except certain cleaning, servicing, and repair work, which is paid for at time and a half. Several agreements specify double pay after 8 hours of overtime work on Saturday.

The usual rate for work on Sundays and holidays is double time, although a few provide the time and a half rate. Maintenance employees customarily work on Sundays and holidays at regular pay; although one agreement establishes a penalty rate of time and a half for maintenance workers, the other employees receiving double pay. In one instance, if an employee is required to work more than 10 hours on Sunday, his rate for the excessive hours is determined by the shop committee and the employer.

Metal Mining

About one-fourth of the workers engaged in metal mining are under union agreements. The predominant union is the International Union of Mine, Mill and Smelter Workers (C. I. O.). There is also some organization by A. F. of L. craft and federal labor unions, as well as several locals of the Steel Workers Organizing Committee (C. I. O.). The largest company under agreement is the Anaconda Copper Mining Co.

With a few exceptions, an 8-hour day and 5-day week is worked in metal mining. A 7½-hour day, 6 days a week, is provided in one agreement; a 7-hour day is specified in another. A 48-hour week is specified in three agreements covering smaller mines.

Time and a half is the prevailing overtime rate in this industry. Exceptions to the regular overtime provisions are specified in a few cases when the overtime is due to shift changes or delays in hoisting workers from the mine as result from accidents or other causes beyond the control of the company.

There are no special provisions covering work on Saturday and Sunday.

More than half the workers covered by these agreements, including the Anaconda agreement, receive double pay for holiday work. In one agreement, affecting a very small proportion of workers, time and a half is paid for work on 4 holidays but double time is paid for work on Christmas. Maintenance, repair, and emergency work, however, is usually excepted from these penalty rates.

Rubber Industry

About two-thirds of the workers in the rubber industry are covered by union agreements. The United Rubber Workers of America, C. I. O., is the predominant union in the industry, but directly affiliated A. F. of L. federal labor unions account for about 10 percent of the union coverage, including the Hood Rubber Co. plant at Watertown, Mass., and the United States Rubber Co. plant at Providence, R. I. The Patternmakers League of North America, the Brotherhood of Electrical Workers, and a few other A. F. of L. craft unions have also organized particular groups of skilled workmen. Among the establishments organized by the United Rubber Workers are the Goodrich, Firestone, General, and Seiberling plants in the Akron area and the United States Rubber Co. plants at Detroit, Indianapolis, and Chicopee Falls, Mass.

Most of the agreements covering workers in tire and tube plants and departments establish a 6-hour day, 36-hour week. The 8-hour day, 40-hour week prevails in most of the agreements covering the manufacture of other rubber products. One agreement, covering a smaller company, permits the work to be spread over 6 days, rather than 5, during any 6-month period when orders require production of a specified amount.

Overtime pay, however, generally begins after 8 and 40 hours, even for plants operating on a 6-hour day, 36-hour week basis. The extra hours of work are permitted in the Akron plant of Goodrich only in cases of "extreme emergency" or when "necessary for the preservation of the company's business." In no case, however, may a production worker be employed more than 1,800 hours in a calendar year. In the General Tire & Rubber Co. agreement, the extra hours are limited to 4 a week and confined to emergencies. Most of the other agreements also restrict in some way the extension of hours from 6 to 8.

Only a few of the smaller plants pay overtime rates after 6 hours in a day and 36 in a week and most of these do so only for certain departments. In some of these, which pay for overtime after 6 and 36 hours, the rate is time and a third instead of the customary time and a half. Practically all of the other workers receive time and a half for overtime.

Time and a half is paid for all work on Saturday which is not a part of the employee's regular schedule, except in a few small plants which pay time and a third. The agreements do not specify the work which can be regularly scheduled for Saturday, but tire and tube production customarily includes the Saturday schedule. In general, if a holiday or a major breakdown occurs during a week, Saturday work is not compensated for at the penalty rate.

About a third of the rubber agreements provide double time for Sunday work, and a slightly larger proportion provide double time for work on holidays. Most of the others pay time and a half for holidays and Sundays, although a few provide for only time and a third. Double time is not paid by any of the large companies. Regularly assigned maintenance men, boilerhouse men, and watchmen usually receive straight time for work on Saturdays, Sundays, and holidays, but in the few cases when the other workers receive double rates, they receive time and a half.

Shipbuilding Industry

About one-half of the workers in the private shipbuilding industry, the greater part of which is concentrated on the Atlantic coast, are working under union agreements. The unions which have signed agreements covering shipyards are the A. F. of L. craft unions, generally affiliated with local metal-trades councils, and the International Union of Marine and Shipbuilding Workers (C. I. O.).

All of the agreements provide for an 8-hour day, 40-hour week. One company, which is regularly on an 8-hour day, 40-hour week schedule, requires only 7 hours per day and 39 hours per week for repair workers.

About a third of the workers under agreement receive double pay for all overtime work. These agreements include Todd-Johnson Dry Docks, Inc., Todd-Galveston, Western Pipe & Steel Co. of California, Tampa Shipbuilding & Engineering Co., Seattle-Tacoma Shipbuilding Co., and the general Seattle agreement. In a few others double time is paid for some types of work, while time and a half applies to the other work.

Approximately two-thirds of the shipyard workers are covered by the time and a half overtime rate, including New York Shipbuilding Corporation, Federal Shipbuilding & Dry Dock Co., Maryland Dry

Dock Co., Alabama Dry Dock & Shipbuilding Co., Ingalls Shipbuilding Co., Los Angeles Dry Dock, Bethlehem Shipbuilding Corporation at San Pedro, and the American Shipbuilding Co. Three agreements increase the time and a half rate to double time after 8 hours' continuous overtime.

Under these agreements the penalty rates for Saturday work are the same as the overtime rates. In one agreement, having a time and a half overtime rate, however, any work after noon on Saturday is paid for at double time. Two other agreements having a time and a half overtime rate provide for double time for repair work on Saturday.

Work on Sundays and holidays is compensated for at twice the regular rate for virtually all of the shipbuilding employees, although a small proportion receive time and a half. Pay at two and a half times the regular rate for work over 8 hours on holidays is provided for in one agreement covering over 10,000 employees.

ACTIVITIES OF NATIONAL LABOR RELATIONS BOARD, 1939–40 [1]

THE duties of the National Labor Relations Board are of two general types: (*a*) To prevent employers engaged in interstate commerce from engaging in any of the unfair labor practices listed under the National Labor Relations Act, and (*b*) to settle controversies with respect to representation of employees and to certify the name of the employee organization which shall represent the workers.

During the fiscal year ending June 30, 1940, the National Labor Relations Board disposed of 7,354 cases involving 1,488,020 workers. In about 38 percent of the cases closed, settlements were obtained informally through the cooperation of the employer, the union, and agents of the Board; about 17 percent of the cases were dismissed by regional directors after investigation revealed that further proceedings were unwarranted; and in about 28 percent of the cases the parties withdrew their petitions. In only about 17 percent of the cases closed were formal proceedings before the Board necessary.

Cases Involving Unfair Labor Practices

Altogether, 4,664 cases, involving 870,000 workers, pertaining to unfair labor practices, were handled by the Board. Hearings were necessary in only 255 of these cases. Approximately 31,000 workers were reinstated during the year after discrimination because of union membership or after strikes in protest against alleged violation of the act. Approximately 4,800 workers received back-pay awards amount-

[1] Data are from National Labor Relations Board, Fifth Annual Report, for fiscal year ended June 30, 1940, Washington, D. C., 1941.

ing to a total of $650,000. Other forms of remedy included the posting of 1,000 notices by employers agreeing to cease interfering with labor organization, the disestablishment of 220 company-dominated unions, the agreement to bargain collectively in 880 cases, and the signing of written agreements in 600 cases.

Representation Cases

Representation cases closed during the year totaled 2,690. Of these, 1,264 were A. F. of L., and 1,004 were C. I. O. cases, 366 were cases of unaffiliated unions, and 56 were employer petitions.

Of the total number of representation cases, 73 percent were closed before the initiation of formal proceedings, these through consent elections, voluntary recognition of representatives on the part of employers, or pay-roll checks to establish bargaining representation.

The Board conducted a total of 1,192 elections during the year; 676 of these were with the consent of both unions and employers and 516 upon Board direction. More than 90 percent of the 590,000 workers eligible to vote in these elections cast their ballots. Of the valid votes cast, 70 percent were cast for A. F. of L. or C. I. O. affiliates, 3 percent were cast for national unaffiliated unions, 9 percent for local unaffiliated unions, and 18 percent against any or all unions appearing on the ballot.

A. F. of L. unions appeared in 734 elections in which 340,000 valid votes were cast for the Federation affiliates. C. I. O. unions appeared in 692 elections in which they secured 447,000 votes. Unaffiliated national unions appeared in 115 elections in which they secured 37,000 votes. Unaffiliated local unions appeared in 134 elections in which 93,000 valid votes were cast in their favor.

Number of Elections Participated In, Won, and Lost During the Fiscal Year by Different Types of Labor Organizations [1]

Type of union	Elections in which union participated		Elections won				Elections lost			
	Number	Valid votes cast	Number	Percent of total in which union participated	Valid votes cast		Number	Percent of total in which union participated	Valid votes cast	
					Number	Percent of total cast			Number	Percent of total cast
A. F. of L. affiliates	734	343,439	386	52.59	70,700	20.59	348	47.41	272,739	79.41
C. I. O. affiliates	692	447,236	407	58.82	313,852	70.18	285	41.18	133,384	29.82
Unaffiliated national unions	115	37,043	45	39.13	9,499	25.64	70	60.87	27,544	74.36
Unaffiliated local unions	134	93,170	83	61.94	63,697	68.37	51	38.06	29,473	31.63

[1] Includes only those elections which were won by some form of labor oganization.

Employment and Labor Conditions

ECONOMIC AND SOCIAL CONDITIONS IN THE VIRGIN ISLANDS

THE year 1940 marked the end of the first decade during which the United States Department of the Interior had administrative jurisdiction over the Virgin Islands. The annual report by the Governor of the Islands [1] states that the present situation when compared with former conditions and with conditions in other West Indian areas reveals much progress. Advances are recorded in the field of public health, particularly by a great reduction in infant mortality; in education; and in the institution of public works and the building of highways, although prolonged droughts in the last 4 years have seriously affected the Islands' finances. New industrial enterprises and fortification of the Islands under the defense program are of great importance to the local economy, having for the present practically eliminated unemployment, with the expectation that even after the present defense construction is completed, conditions will be greatly improved.

The 1940 census shows that the population, which had been steadily declining since 1860, increased from the low point of 22,012 in 1930, to 24,889, an increase of 13.1 percent in the 10 years. This increase is an indication of economic improvement, as is also the reversal of the historical tendency of emigration from the Islands for the purpose of economic improvement, and there is now an excess of immigration over emigration. This immigration has brought with it certain problems, since much of it is from Puerto Rico and neighboring Islands, where the racial, social, and language origins are different from those of the Virgin Islands.

Economic Conditions

Adverse economic conditions in the Virgin Islands are shown by the fact that in the past 20 years the value of exports has in only 1 year been greater than the value of imports. This continued adverse balance has been offset in recent years, however, by the expenditure of Federal funds, by ship-servicing charges, and by tourist expendi-

[1] Annual report of the Governor of the Virgin Islands, for the fiscal year ended June 30, 1940. Washington, 1940.

tures. Sugar, rum, bitters, and cattle are the chief export articles, while coal and oil are imported for resale.

The Sugar Industry

Sugarcane is the principal crop in the Islands, but after about the middle of the last century its cultivation was discontinued in the Islands of St. Thomas and St. John, and only St. Croix has continued to depend on sugar cultivation as its basic industry. In spite of competition from the beet-sugar industry, and from better cane-producing areas throughout the world, which have made survival difficult, the industry is still the largest single employer of labor in the Islands, and for lack of any other suitable cash crop, the most important economic factor in St. Croix. The estate system of sugarcane cultivation has practically disappeared, and sugar-cultivation units are now in the hands of corporate owners, who operate sugar-processing mills or factories. The size and organization of these agencies render impossible the direct relationship between owner and workers which characterized the plantation system.

Experience in other West Indian islands has shown that small holdings offer at least a partial solution to the social and economic problems of these areas. Various administrative policies have been directed in the last few years toward making land available and financing small holders' operations, and a program of farm loans which should be sufficient to meet the needs of small farmers is being established by the Farm Security Administration. Removal of the present restrictive tax on sugar exports is said to be necessary, as are also regulation and supervision of sugar-mill laboratories and the licensing of sugar-mill chemists and of weighers and checkers. The Governor expresses the opinion that unless the United States Government enacts legislation which will return to the local treasury the taxes now collected under the provisions of the Sugar Act of 1937, which would enable the local authorities to establish a system of benefit payments, there is little hope that the sugar industry will survive.

Homestead Policy

Preliminary figures of the 1940 census record an increase in the number of farms in the Virgin Islands from 329 in 1930 to 828 in 1940—a result of the homestead program inaugurated in 1931 and later considerably expanded. In 1931, Congress appropriated funds to purchase large estates for subdivision and resale to small farmers or homesteaders, and subsequent additional allocations have resulted in the purchase of 3,552 acres in the Islands of St. Croix and St. Thomas, which are now being sold under rental-purchase contracts

to 328 small holders. In addition 77 families have been established on small holdings by the municipality of St. Croix.

Ninety-one modern houses of two to four rooms have been either constructed or remodeled on the above areas, and are being sold to the purchasers of the holdings, but many more houses are needed. The acreage allotted to homesteaders—originally 6.37 acres—was recognized as being too small to provide adequate family income as well as amortization, and a policy was therefore adopted of dividing among adjacent homesteaders the plots reverting to the government in case of death or cancelation of contracts; this procedure had resulted at the time of the report, it is stated, in increasing the average size of homesteads to 7.75 acres. Although the program gave promise of rehabilitating a large number of families, discriminations against the sugar business and the prolonged drought have imperiled its successful operation.

Virgin Islands Co.

The Virgin Islands Co., established by the Colonial Council of the Municipality of St. Thomas and St. John, in 1934, and chartered to engage in a wide variety of activities for the economic rehabilitation of the Islands, has been financed entirely by Federal emergency relief funds. The company produces 40 percent of the crop of sugarcane, processes 60 to 70 percent of the raw sugar, and produces 80 percent of the rum manufactured in the Island of St. Croix.

Endeavoring to evaluate the effect of this company's operation, the Governor notes that the present wage rates of 80 cents and $1 per day are higher than when the company began to operate, and housing conditions have been improved for the company workers. While some of the workers are employed on a yearly basis, most of them are still in the category of casual laborers. Independent cane producers, of whom 600 or more sell their crop to the company, have secured no appreciable benefit from its operation. The crop yield is much below that of Puerto Rico and nearby British West Indian Islands, and under the severe drought conditions of recent years, the average yield has been below 10 tons per acre, as compared with average yields ranging from 30 to 70 tons in Puerto Rico and the neighboring islands.

Examining the results of the 6 years' operations of the company, the report recommends its reorganization, the subdivision into small farms of the 5,000 acres of Government-owned land which it now uses rent free, and their sale to homesteaders. Although it would appear that legal discriminations against the sugar business in the Virgin Islands, drought, the distance from markets, and other natural disadvantages would make it impossible for small farmers to make a

living on their farms, the Governor feels that those laborers who secure homesteads will be better off even in periods of severe drought and low farm income, than are company laborers who may be dismissed in such periods, since they can secure a large part of their subsistence from their farms.

The direct nature of Farm Security Administration assistance will make such a program less costly to the Government than is any involving the continuation of large-scale entrepreneurial sugar cultivation in the face of high cost of production, low price of sugar, and recurring drought. The 90-percent repayment record in normal years of present homesteaders promises well for the eventual recovery by the Government of its investment in land and houses if this plan is adopted.

Other Industries

The chief economic asset of St. Thomas Island is its harbor, and shipping and the servicing of ships have historically been the principal business. With changing world conditions, this business has fluctuated, but in recent years there has been a shipping revival resulting from the tourist trade and also from the considerable use of the port of St. Thomas by ships of the United States Navy.

During 1940 the number of cruise ships visiting the port was greatly curtailed as a result of the war, and this has affected the handcraft cooperative market which had been developed through the use of Government funds and with Government support. This cooperative organization has been the means of bringing in a small additional cash income to the families of approximately 700 workers. Profits of the cooperative have been distributed among workers in annual bonuses, which have ranged from 2 to 7 percent of the value of goods produced. The tourist and winter-resident trade, if given sufficient Government assistance, it is said, can make a substantial contribution to the economic revival of the Islands.

Efforts by various Government agencies to promote the production and consumption of vegetables have begun to show results. The establishment of the St. Thomas Agricultural station and the opening and improvement of many miles of farm-to-market roads, developed as WPA and CCC projects, are recent aids to farm economy.

Education

Educational facilities have been expanded in the past 20 years. Between 1921 and 1940 enrollment in all schools increased by 24 percent, the number of teachers increased by 53 percent, and appropriations for maintaining the public-school system, by 54 percent. The courses have been changed to provide vocational training both in elementary and high schools, and health instruction, physical training, and athletic programs are maintained. The educational

status of teachers, who are almost all natives, has been improved through cash grants or loans to students or teachers who wish to continue their education on the mainland, and a number of tuition scholarships have been made available in certain colleges here and in Puerto Rico. The Virgin Islands are not eligible to receive benefits under the various vocational-educational grants-in-aid in effect in the United States, although there is special need for the development and continuation of this type of educational activity in the Islands.

Public Health and Welfare

Public health and medical services, which were characterized as deplorable when the Islands were purchased from Denmark in 1917, have improved in recent years, at first under a staff of Navy doctors and later with a staff of Navy nurses. In 1931, when the administration of the Islands was transferred to the Interior Department, civilian doctors were appointed for this work, and the excellent record of the Navy Department in the medical field has been maintained under the civil administration. The death rate has been leveled off at an annual average figure in the last 10 years of 21.34 per thousand. This decline, and the increase in the birth rate from an annual average of 24.57 in the 10-year period 1920–29 to an annual average of 29.05 in the period 1930–39 (resulting from prenatal and child care), were due to the improved economic and social conditions.

Relief allocations have been made available for sanitation needs such as mosquito control, construction of sewers, and provision for a public water supply, although lack of funds has prevented provision of adequate common water supplies for the towns. Lacking also are control of the processing and distribution of perishable foodstuffs, and additional funds are needed for the care and control of leprosy and certain other communicable diseases, as well as for care of the insane.

In general, in spite of the improvements registered, the social problem in the Virgin Islands is said to be that of a community in economic decline, with slender natural resources and with inadequate governmental revenues. "The economic decline is not a condition of recent origin but has been characteristic for several generations. Underemployment or unemployment, malnutrition, wretched housing, and low wages, have all contributed to the development of social problems that are now chronic."

IMPROVEMENTS IN LABOR CONDITIONS OF FINNISH SEAMEN

SEAMEN are to receive larger rations of sugar, butter, bread, and other provisions than workers ashore, according to an agreement resulting from a recent conference between the Minister of Food and the Seamen's Union of Finland. In addition seamen are to get special cards enabling them to buy bread in restaurants when ashore.[1]

The collective agreement in force for Finnish seamen was due to expire at the end of September 1940. A new agreement was concluded, effective from October 1, 1940, which provides for an average increase of about 15 percent in wages and for the right of the representatives of the union to visit ships for the purpose of settling questions affecting the crews. Both the new and old monthly rates for Finnish seamen are shown in the following table.

New and Old Monthly Wage Rates for Finnish Seamen

Group of workers	Monthly wage rates (in marks [1])		Group of workers	Monthly wage rates (in marks [1])	
	Old	New		Old	New
Deck and engine room personnel:			Male catering personnel:		
Carpenters	1,430	1,600	Stewards	1,900–2,400	2,100–2,700
Boatswains	1,350	1,600	Cooks	1,350–1,550	1,400–1,750
Able seamen	1,150	1,350	Assistant cooks	850	975
Ordinary seamen	900	1,050	Cook stewards	1,700	1,950
Boys	560	650	Female catering personnel:		
Donkeymen	1,350	1,600	Stewardesses (cargo)	1,100–1,200	1,275–1,400
Greasers	1,200	1,400	Cooks	900–1,000	1,050–1,150
Firemen	1,150	1,350	Assistant cooks	550	650
Trimmers	900	1,050			
Motormen	1,200	1,400			

[1] Average exchange rate of Finnish mark in November 1940=1.95 cents.

A supplement to the agreement provides for war-risk bonuses, ranging from 580 to 1,730 marks for able seamen, according to the danger zone and a proportional amount for other ratings.

[1] International Transport Workers' Federation, Press report (Kempston Beds, England), January 27, 1941.

Women in Industry

WOMEN'S WAGES AND HOURS IN NEBRASKA, 1938

HOURLY earnings of woman workers in Nebraska in 1938 were highest in the meat-packing industry and lowest in laundries and dry-cleaning plants. With the exception of certain office employees, women in the meat-packing industry also had the highest weekly earnings. Woman workers in Omaha generally had higher earnings than those in other places. These and other facts were ascertained in a survey by the United States Women's Bureau of the important woman-employing industries in the State.[1] The survey was made in the last 3 months of 1938 and covered 232 establishments employing a total of 7,336 women. The study included the manufacturing industries, retail stores, laundries, dry cleaners, beauty shops, hotels, restaurants, and insurance and wholesale distributing offices, and is considered as representative of women's employment in the State.

Week's Earnings

For the State as a whole, earnings of women in factories for the week reported averaged $14.90. The average for Omaha was $15.55, which was $5.25 higher than the average for other places and 65 cents above the general average. One-fifth of all the women in the factories studied earned less than $10 in the week reported.

Average earnings of women in retail stores for the week reported were less than $15, regardless of the type of store. Women working in laundries and dry-cleaning establishments earned, on an average, $10.65 in the week, and those in hotels and restaurants averaged even less—$8.80 in hotels, $9.55 in store restaurants, and $8.90 in other restaurants. However, employees in hotels and restaurants generally received meals and sometimes lodging in addition to cash wages, though the practice varied. The average earnings reported did not include such supplements, the cash equivalent not being reported, nor tips, as the amount was not of record.

Women's earnings in beauty shops for the week reported ranged from less than $5 to $32, with an average of $15.45. In addition to cash wages, beauty-shop workers frequently receive tips, though 18 of the

[1] U. S. Department of Labor. Women's Bureau. Bulletin No. 178: Woman's Wages and Hours in Nebraska. Washington, 1940.

22 shops covered reported that the tips received amounted to little or nothing. In one shop, however, tips averaged $1.25 a day for beauty operators, ranging from nothing to $14.

In office employment women had relatively high earnings in the week recorded, though earnings in the different types of offices varied from $15.75 in stores to $29.20 in miscellaneous offices.

In table 1 are presented average week's earnings in the industries covered, not only for the State but also for Omaha and other places.

TABLE 1.—*Average Week's Earnings of Women in Nebraska Industries, 1938*

Industry	Number of women	Median week's earnings
Manufacturing		
State	1,695	$14.90
Meat packing	554	19.30
Eggs, poultry, creameries	286	8.20
Bakeries	95	15.10
Crackers and biscuits	93	13.45
Other food	94	14.00
Men's clothing	228	12.20
Paper products	88	14.50
Miscellaneous	257	13.00
Omaha	1,524	15.55
Other places	171	10.30
Retail stores [1]		
State:		
Department	1,046	14.80
Limited-price	355	13.85
Ready-to-wear	215	14.90
Omaha:		
Department	722	14.95
Limited-price	210	14.00
Ready-to-wear	152	15.45
Other places:		
Department	324	14.15
Limited-price	145	12.30
Ready-to-wear	63	12.65
Laundries and dry cleaners		
State	560	10.65
Omaha	348	11.45
Other places	212	9.35
Hotels and restaurants [2]		
State:		
Hotels	474	8.80
Store restaurants	323	9.55
Other restaurants	228	8.90
Hotels and restaurants—Con.		
State—Continued:		
With wage additions: [3]		
Hotels	234	$6.80
Store restaurants	83	9.65
Other restaurants	203	8.40
With no wage additions:		
Hotels	240	9.50
Store restaurants	240	9.55
Omaha:		
With wage additions: [3]		
Hotels	87	9.30
Store restaurants	49	11.65
Other restaurants	128	10.60
With no wage additions:		
Hotels	150	9.65
Store restaurants	140	10.15
Other places:		
With wage additions: [3]		
Hotels	147	6.45
Other restaurants	75	7.45
With no wage additions:		
Hotels	90	9.05
Store restaurants	100	5.85
Beauty parlors		
State	110	15.45
Omaha	67	15.80
Other places	43	14.50
Office employment		
Stores	290	15.75
Factories	426	20.05
Laundries and dry cleaners	40	15.85
Banks	112	23.05
Insurance offices	296	20.25
Miscellaneous offices	532	29.20

[1] Data shown are for regular employees; data for part-time workers are also presented in the Women's Bureau report.
[2] Tips are not included in averages given.
[3] Meals, lodging, or both; cash equivalent was not reported.

Hours Worked

A week of 40 or more hours was worked by the majority of the women covered in the survey. In meat packing, eggs and poultry plants, and laundries and dry-cleaning establishments, large proportions of the women had shorter hours. In many establishments the shorter hours worked by the women were due to short time or irregular work, rather than to a short scheduled week.

Beauty shops had long working hours, the weekly hours ranging from 43 to 54. Limited-price and ready-to-wear stores also had long hours. Table 2 shows the hours worked by women in the various industries where records were available.

TABLE 2.—*Hours Worked by Women in Nebraska Industries, 1938*

Industry	Number of women	Percent of women who worked—					
		Under 32 hours	32 and under 40 hours	40 and under 44 hours	44 and under 48 hours	48 and under 54 hours	54 hours and over
Manufacturing							
State	1,460	8.9	34.2	35.0	11.1	10.1	0.6
Meat packing	554	9.7	61.9	14.1	5.7	8.5	.....
Eggs, poultry, creameries	135	23.0	33.3	23.0	6.7	14.1	.....
Bakeries	92	7.6	22.8	59.8	8.6	1.1	.....
Crackers and biscuits	93	17.2	21.5	18.3	21.5	21.5	.....
Other food	92	6.5	9.8	10.8	18.5	53.3	1.1
Men's clothing	193	4.7	8.3	72.6	14.6	.....	.....
Paper products	85	3.5	29.4	35.3	12.9	10.6	8.3
Miscellaneous	216	1.9	9.7	69.4	17.2	1.4	.5
Omaha	1,377	9.0	35.5	35.4	11.3	8.3	.6
Other places	83	7.2	13.3	27.7	8.4	42.1	1.2
Retail stores							
State:							
Department	1,025	3.3	3.9	[1] 61.3	22.1	8.9	.5
Limited-price	355	5.1	3.4	23.4	31.0	36.1	1.1
Ready-to-wear	188	1.6	10.1	[2] 52.7	4.3	27.7	3.7
Omaha:							
Department	701	4.3	5.3	[3] 89.3	1.1	.....	.....
Limited-price	210	5.2	4.8	36.7	37.1	16.2	.....
Ready-to-wear	128	1.6	13.3	[4] 77.3	3.1	.....	4.6
Other places:							
Department	324	1.2	.9	.6	[5] 67.6	28.1	1.5
Limited-price	145	4.8	1.4	4.1	22.1	64.8	2.8
Ready-to-wear	60	1.7	3.3	.....	6.7	[6] 86.7	1.7
Laundries and dry cleaners							
State	557	17.4	30.0	15.8	25.1	10.1	1.7
Omaha	346	12.1	31.5	11.5	31.8	11.6	1.4
Other places	211	26.1	27.5	22.7	14.2	7.6	1.8
Office employment							
State	434	3.2	1.8	53.2	23.8	14.7	3.2
Stores	275	3.6	2.2	51.7	21.5	17.1	4.0
Manufacturing	130	2.3	1.6	66.2	27.7	2.3	.....
Omaha	337	2.4	2.4	68.2	17.5	5.7	3.9
Stores	192	2.6	3.1	73.4	11.0	4.7	5.2
Manufacturing	125	2.4	1.6	68.8	24.8	2.4	.....
Other places	97	6.2	.....	1.0	45.3	46.4	1.0
Stores	83	6.0	.....	1.2	45.8	45.8	1.2

[1] 59.6 percent worked 43½ hours.
[2] 39.4 percent worked 43½ hours.
[3] 87.2 percent worked 43½ hours.
[4] 57.8 percent worked 43½ hours.
[5] 60.5 percent worked 46 hours.
[6] 55.0 percent worked 49 hours.

Hourly Earnings

Hourly earnings were computed for those industries where records of hours actually worked were available. The average was highest in the meat-packing industry. Hourly earnings followed somewhat the same trends as week's earnings. Table 3 indicates the hourly earnings in various industries.

TABLE 3.—*Hourly Earnings of Women in Nebraska Industries, 1938*

Industry	Number of women	Median hourly earnings	Industry	Number of women	Median hourly earnings
Manufacturing		*Cents*	*Retail stores*—Continued		*Cents*
State	1,460	39.0		324	30.7
Meat packing	554	49.9	Other places:	145	26.0
Eggs, poultry, creameries	135	27.9	Department stores	60	26.1
Bakeries	92	37.6	Limited-price stores		
Crackers and biscuits	93	33.7	Ready-to-wear stores		
Other food	92	34.5		557	25.0
Men's clothing	193	30.3	*Laundries and dry cleaners*	346	27.0
Paper products	85	36.4	State	211	25.0
Miscellaneous	216	32.8	Omaha		
Omaha	1,377	40.9	Other places		
Other places	83	27.4		434	37.2
Retail stores			*Office employment*	275	34.8
State:			State	130	47.7
Department stores	1,025	33.0	Stores	337	38.0
Limited-price stores	355	30.5	Manufacturing	192	34.9
Ready-to-wear stores	188	33.3	Omaha	125	48.2
Omaha:			Stores	97	34.2
Department stores	701	34.1	Manufacturing	83	34.3
Limited-price stores	210	31.1	Other places		
Ready-to-wear stores	128	35.8	Stores		

Year's Employment and Earnings

Data as to the earnings of all women who had been employed in 1937, whether for few or many weeks, were collected from the firms which had such records. This information covered 7,201 women.

Short-time employment was considerable, 22 percent of the women having been with the firm less than 4 weeks and 19 percent 4 but under 12 weeks. Only in office work did so many as one-half of the women engaged, work 48 weeks or more. Meat-packing plants and a store-restaurant group were the only other two classes which provided work for as many as two-fifths of the women employed for 48 or more weeks. In fact, office work and meat packing were the only groups in which half of the women had employment with the firm reporting for as many as 36 weeks in the year.

The total earnings in the year reported for individual women on the firms' books in 1937, regardless of time worked, ranged from less than $25 to more than $2,500, with an average of $176.50 for all industries. Office workers had the highest average, $792, and three-tenths earned $1,000 or more. Average year's earnings of women in the various industries are given in table 4.

TABLE 4.—*Average Year's Earnings of Women in Nebraska in 1937, by Industry*

Industry	Number of women with year's earnings reported[1]	Median year's earnings	Percent of women who earned —							
			Under $100	$100 and under $200	$200 and under $400	$400 and under $600	$600 and under $800	$800 and under $1,000	$1,000 and under $1,200	$1,200 and over
All industries	7,201	$176.50	42.0	9.8	11.4	10.6	12.0	7.6	3.7	2.8
Manufacturing	2,329	244.00	33.5	12.7	16.5	16.1	9.2	7.4	3.7	.9
Food products	1,604	183.50	37.6	14.2	15.0	10.5	8.0	8.4	5.0	1.3
Meat packing	417	747.00	20.1	6.0	11.0	7.2	7.9	25.6	18.3	3.8
Other food	1,187	128.00	43.7	17.0	16.5	11.8	7.9	2.4	.4	.4
Clothing	336	246.50	34.2	11.9	19.6	26.8	4.8	2.1	.6	------
Stores	2,831	94.00	51.1	8.5	7.8	6.0	16.1	6.3	2.2	1.8
Department	2,259	91.50	51.5	8.1	7.2	5.6	17.0	6.6	2.3	1.7
Limited-price	181	92.00	53.0	11.0	16.5	7.8	5.0	6.1	.6	------
Ready-to-wear	391	115.50	47.8	9.7	7.2	7.7	16.3	5.1	3.0	3.1
Laundries	114	212.50	33.3	15.8	12.2	34.2	2.7	1.8	------	------
Beauty shops	109	469.00	19.3	14.7	13.8	14.7	13.8	10.1	4.6	9.2
Hotels	522	39.50	64.0	7.1	12.6	7.1	6.5	1.7	.6	.4
Lodging department	188	17.50	68.1	9.0	13.3	7.4	1.6	.5	------	------
Restaurant department[2]	309	46.00	63.4	5.8	11.7	7.1	7.8	2.6	.9	.6
Store restaurants	201	104.00	49.8	8.5	8.0	16.9	15.9	1.0	------	------
Value of meals included	121	51.00	63.6	6.6	4.9	5.0	18.1	1.7	------	------
Value of meals not included, or no meals	80	375.00	28.8	11.3	12.5	35.0	12.5	------	------	------
Other restaurants	352	138.50	44.3	11.4	15.1	10.2	11.6	5.1	1.4	.9
Value of meals included	217	197.00	37.8	12.4	15.3	9.7	12.9	8.3	2.3	1.4
Value of meals not included, or no meals	135	67.50	54.8	9.6	14.8	11.1	9.6	------	------	------
Office work	743	792.00	20.5	5.7	7.4	7.4	9.6	20.2	13.6	15.7

[1] Some totals exceed details because of the inclusion of groups too small to be shown separately.
[2] Value of meals is included in earnings.

CHILD WORKERS ON FARMS IN ERIE COUNTY, N. Y.

IN THE summer of 1940, 472 children 10 years old or less—30 of them under 5—were found working up to 10 hours per day, picking berries and beans on 100 commercial farms in Erie County, N. Y. In making a special report on this survey, which included 3,670 workers, 59 percent of whom were under 18 years of age, the New York State Industrial Commissioner said: [1]

> It may appall citizens of a good labor standards State like New York to know that there is still as much child labor here as this spot study would indicate. Commercial agriculture, with the exception of street trades, is the last serious child labor problem in the State.
>
> Most New York citizens have felt that the industrial exploitation of children is pretty well controlled, but we have to reconstruct an entirely new picture of life to understand how these agricultural child workers help earn the family living. Commercial-farm proprietors hire whole families who go out during picking season and harvest the crops. Families with many children are preferred because there are more hands to pick the fruit and garden truck. These young hands are economic assets—they represent the difference between profit and loss to the family. Babies go along because mother has no one to leave them with.

Children 3 and 4 years old were tied to trees all day long in the summer heat to prevent them from wandering away while their mothers worked in the fields. One inspector reported that children were preferred to adults, because in numerous cases the former "do better at picking than the older folks—the older people become fatigued in the sun."

The industrial commissioner, commenting on these conditions, points out that "a summer on the farm sounds fine" and that under proper circumstances older children might dig in the dirt and earn a little money themselves probably without any harmful effects. She added, however, that a 10-hour day for children 8 years of age in unsanitary and demoralizing camps undoubtedly does not make for the conservation of manpower for industry in the years to come.

Although this special survey was confined to Erie County, it was requested not only by the Buffalo social agencies but also by the State

[1] New York State Department of Labor. The Industrial Bulletin, New York, January 1941. (For article based on Report of the New York Child Labor Committee, on Child labor on truck farms in New York State (mimeographed), see Monthly Labor Review, February 1941 (pp. 391-392).)

Committee on Summer Farm Problems, which has long endeavored to regulate child labor on the commercial farms in New York State.

The investigation was made by the division of inspection of the State Department of Labor. The findings will be used by various interested groups as a basis for discussion of methods to improve standards in the operation of commercial agricultural undertakings.

Farm Labor Camps

The great majority of the workers on the commercial farms covered in the survey have homes in Buffalo or in the neighborhood of that city and in the picking season are taken to the labor camps established in connection with the farms. Eighty-eight of the camps with 3,296 residents were inspected, and many were reported to be in poor condition.

The workers were taken from camp to farm and back, daily, in the proprietor's truck, ordinarily an open one and often very old. In many instances the owner of the truck carried no insurance on it, although transportation probably constitutes the major hazard to the workers.

In a few cases the proprietor did not operate a labor camp but hired workers living in the community in which the farm was situated or in a town in the vicinity. The transportation of the workers was cared for by the proprietor.

Although New York State has provided no regulations for the safety and sanitation of labor camps, it has issued rules applicable to labor camps operated in connection with factories. These rules make provision "for decent quarters and sanitary facilities for housing intended for temporary use during the most favorable season of the year." If the code for factory camps had been applied, inspectors would have issued orders for the correction of 1,117 violations.

The objectionable conditions reported centered in "inadequate or nonexistent provision for washing and bathing, unsanitary toilet facilities without proper provision for privacy or hygienic disposal of waste materials."

CHILDREN IN THE THEATER

NEARLY all of the States have legislation concerning the employment of children as entertainers, but the laws vary greatly as to the kinds of work covered, the age and circumstances under which employment is allowed, and the status of these young wage earners with road companies. Furthermore, new bills are being introduced in State legislatures to raise or lower present requirements.

So little seemed to be known regarding the working conditions of children in the entertainment industry that the National Child Labor

Committee, after consultation with representatives of both child welfare and theatrical interests, conducted a study of children on the legitimate stage in the hope that studies of children in the allied fields of entertainment might follow. The facts presented in its report, recently published,[1] are based on—

1. Intensive study of 65 children who have recently engaged in professional employment.

Interviews were held with parents of these children; two-thirds of the children were interviewed following the talk with their parents; detailed school records of 42 of the children (those enrolled in the Professional Children's School) were obtained; group intelligence and achievement tests were given to 34 children.

2. Interviews with 16 adults who had been child actors.
3. Consultation with producers, stage managers, and playwrights.
4. Interviews as to permit procedure with the directors of three of the societies for the prevention of cruelty to children in New York State.
5. Examination of permits issued at the mayor's office for children's theatrical appearances in New York City between September 1925 and June 1940.

Special Problems

It is noted in the introduction to the report that children on the legitimate stage do not take the places of older workers. They are used only when a play calls for a child's part; and in some cases, where a play has a long run, another child has to be substituted for one who has outgrown the part. Again, the term "cheap child labor" does not apply to the type of employment under discussion, for every child on the legitimate stage is paid a fixed salary rate under a contract of the Actors' Equity Union.

The one problem to be considered is whether theater employment is advantageous or disadvantageous to the child. The significant aspects would seem to be the results of such employment upon schooling and health, the psychological effects, whether the work interferes with normal childhood activities, and to what extent it is of vocational value.

Findings of Study

The home backgrounds of the children included in the study varied widely, some of their fathers being laborers and others professional men. Less than one-third of these children belonged to families with any experience on the legitimate stage or in other fields of the entertainment industry.

AGE OF CHILDREN IN THE THEATER

The age at which the child starts work on the legitimate stage is subject to great variation. Among the 63 child actors covered by

[1] National Child Labor Committee. Children in the Theatre. By Anne Hood Harken and Gertrude Folks Zimand. New York, 419 Fourth Ave., 1941.

the report, who had appeared in Broadway productions, only 7 had had their first part before they were 7 years of age. It is probable this was due to the fact that for a long period 7 years has been the minimum age in New York City, although there are exceptions to this provision. For the whole group the median age at their first appearance in the legitimate theater was 9 years.

Of the 1,138 child appearances for which permits were granted in the decade and a half from 1925 to 1940, over one-third were for children who were under 10 years of age at the time they appeared. The median age was between 10 and 11 years, being approximately a year older for boys than for girls.

HOURS AND WORKING CONDITIONS

Work on the stage is irregular and intermittent. The hours per day and per week are not excessive, and most of these child actors are employed in the theater for only a small portion of the year. Such employment, however, is wholly dependent upon the number of plays in which a child is to appear during the year and also upon the length of the runs, which cannot be predicted.

Many of the children spent a good deal of time in the search for theatrical employment. About one-third called regularly on agents. Most of the children did not like this phase of their theatrical activities.

The earnings of the majority of the child actors studied were used entirely for their own expenses and benefit and many had savings accounts. About one-third contributed to the general family expenses. In three exceptional cases the children were the sole wage earners in the family.

The investigators found that few of the children in the theater confine their professional activities to the stage. They seek or are "on call" for other kinds of work in the entertainment field—motion pictures, commercial photography, and radio. Even while cast for a play, some will do other work. Some children have many engagements. Others, either from choice or because they do not so readily find opportunities, have relatively little employment during the year.

PHYSICAL, EDUCATIONAL, AND SOCIAL EFFECTS UPON THE CHILDREN

Although there are individual cases of long (in some instances excessively long) rehearsal periods, and also instances in which even young children have had schedules which were too heavy, "it appears that on the whole work in the legitimate theater is an occupation for a small number of children in which proper safeguards are not too difficult to achieve. A regimen is possible which allows for education, recreation, and adequate time for sleep."

In the opinion of the investigators, if the abuses are controlled, and if the child actor has periodic medical supervision, the work cannot

reasonably be considered disadvantageous to the child's physical well-being.

Most of the children studied had superior mental ability, which was reflected in their school grades. Thirty-eight percent were being accelerated in their school work, 58 percent were normal, and only 3 percent were found to be retarded. Although employment in the theater interferes somewhat with the school routine children ordinarily follow, the young actors apparently had overcome this handicap. Most of them were pupils in the Professional Children's School, which offers special facilities for the education of theater children.

Although it was not possible in one or two interviews to measure the social adjustment of the stage children covered by the study, it was noted that certain aspects of their professional employment might be inimical to a normal emotional development, while other features would seem to have an actual psychological value. From the 65 children interviewed, however, "no clear-cut pattern emerged that would justify any conclusions as to the relative advantages or disadvantages of theater work from a mental hygiene viewpoint for the group as a whole or even for individual children."

According to a psychiatrist consulted in connection with the survey, "determination of the psychological effects of early theater employment would necessitate study of child actors over a long period of years, both during the time they were in professional employment and subsequently."

The extent to which theater children are "talented" and the value of their experience as training for a future theatrical career are debatable subjects. Few of these young folks start their professional work in the legitimate theater and many of them find opportunities in the entertainment industry only by chance.

Opinions of the theater children, of their parents, of adults who had been stage children, and of producers, directors, and other persons connected with theatrical life, differ as to the particular advantages of childhood experience in acting with reference to future success in the profession. All, however, agree in the belief that such experience "has definite cultural, educational, and disciplinary values."

PROBLEMS CONNECTED WITH STATE LEGISLATION

The great diversity in State legislation regarding child actors in traveling companies and the lack of a uniform enforcement policy in various cities result in serious difficulties not only for theatrical productions which open out of town or make tours but also for the stage children themselves. Frequent attempts are made to evade these statutes.

Regulation of children's work in the theater must be on a different basis than regulation of other forms of child employment. The child actor is not to be

regarded solely as a working child, but as a participant in an artistic production. The objective of regulation of work by theater children should be to protect the child from undue strain without depriving him of the opportunities and advantages which such employment may bring. It is a field in which supervision is desirable but in which legal regulation should be kept to the minimum necessary to insure such supervision and to prevent individual instances of overwork.

EMPLOYMENT IN OTHER BRANCHES OF ENTERTAINMENT

Although the study here presented was confined to children on the legitimate stage, considerable data were secured with reference to the work of these young people in other fields of entertainment. Of the 65 children included in the survey, 44 had earned money as models in commercial photography, 37 had taken part in radio programs, and 37 had been in motion pictures—mainly feature shorts. Only 17 of the children had appeared in summer stock companies, 6 in television productions, 2 in opera, 1 in vaudeville acts with his father, and several in benefit performances.

Recommendations

In addition to special recommendations of the advisory committee relating to the employment of theater children, it is suggested in the report that a central service for professional children in all branches of the entertainment industry should be established which might (1) serve as an employment exchange, (2) carry on health examinations as a prerequisite for employment permits, (3) make possible the enforcement of regulations for the employment of children, and (4) serve as a consultation and advisory agency for parents and children.

HOME SAVING THROUGH HOUSEKEEPER SERVICE IN COLORADO

THE child welfare services in Colorado include in their activites a housekeeper service, the purpose of which is to supply a competent person to take the place of the woman head of the household when the mother is temporarily or permanently incapacitated for carrying her responsibility in the home.

The four classifications listed below constitute the kinds of situations in which the housekeeper service has seemed to prove most helpful.[1]

Group 1.—Families in which the mother is dead or permanently in an institution. If the father is much attached to his children and the family is of average stability, the housekeeper service is reported as highly satisfactory.

[1] U. S. Children's Bureau. The Child (Washington), October 1940: Home-Saving Through Housekeeper Service, by Juanita Venrick Perkins.

Group 2.—Families in which the mother is away indefinitely—for example, in a tuberculosis sanatorium—but is expected to return. In such a case not only must the family unit be maintained but provision must be made for the mother's coming back to the home.

Group 3.—Families in which the mother remains in the home but is a permanent invalid. In such a situation the mother's attitude is a vital and deciding factor.

Group 4.—Families in which the mother is temporarily out of the household or if at home is not able for the time being to assume responsibility. Such families represent the least urgent need for housekeeper service and in some cases maid service has been used with success.

For these 4 groups the Colorado Division of Child Welfare has in the last 2 years employed 17 housekeepers in 18 families. The period of employment in any 1 family is from temporary service of 1 month to permanent placement of up to 2 years, the service being continued until the eldest girl can take over the responsibility of the home or until some other change in family relationships makes the housekeeper service superfluous. Housekeepers who are found to be satisfactory after their first probationary placements are assigned wherever they are needed. By selecting women who are free to go into new localities, the welfare service is able to furnish permanent employment to a limited number of women and to make up a register of efficient housekeepers.

Although this service has been utilized in seven rural counties of Colorado, by far the largest part of the housekeeper-service program is conducted in counties which have a full-time, professionally trained, child-welfare worker. To some extent the role of the case worker in housekeeper service is the most difficult in this three-cornered scheme, for she must cooperate with both the father and the housekeeper. Knowing more about the operation of the plan, and not being involved emotionally in the arrangement, she is responsible for helping the others to see their particular problems.

The recruiting of housekeepers in rural communities has been found no easy task, for it is the exceptional person who has any idea of a housekeeper, other than a "hired woman," upon whom one can depend.

As a consequence, this means that in every county a careful differentiation must be made between the kinds of responsibility involved in being a homemaker as compared to those involved in being merely a maid. Furthermore, child-welfare workers have been overwhelmed with referrals and applications of women who have been "laid off of work programs periodically and see this housekeeper program of child-welfare services as another work project."

It has been helpful to report to county and welfare advisory boards and service groups some of the problems the child-welfare workers meet in selecting women competent to be homemakers in a motherless household. Many persons in quest of a position as housekeeper may need a job and have a natural love for children without any recognition of "the emotional factors involved in the acceptance by any family of someone to take the mother's place in the home."

Housekeepers for day service rather than for living in the home are sometimes needed, but in the rural regions of Colorado, the long distances and inadequate transportation facilities make it difficult to supply such day service.

In the 18 families which have had housekeeper service in the home, family ties have been maintained for 65 children. According to the author of the report here given, housekeeper service has been useful in helping to preserve for children a home and that security and love provided by a home.

Indian Workers

EMPLOYMENT CONDITIONS AMONG INDIANS

THE Indian Reorganization Act of 1934, which gives preference to Indians for employment in the Indian Service staff, has brought about an increase in permanent Indian employees from a few hundred in 1933 to 4,682 in 1940. On June 30, 1940, Indian superintendents numbered 8, while 251 Indians had professional positions, 935 had clerical jobs, and about 3,475 held other skilled jobs. These figures and the following data are taken from the annual report of the Secretary of the Interior for the fiscal year ended June 30, 1940.

The Indians in regular and temporary positions constitute more than 50 percent of the Indian Service personnel. Furthermore, thousands of Indians have been working intermittently, building roads, dams, wells, hospitals, schools, community buildings, and homes on their reservations. Through the Indian division of the Civilian Conservation Corps and the extension of the PWA and the WPA funds and other emergency relief, various requisite physical improvements were made on 200 reservations while at the same time thousands of Indians have been provided with jobs and training opportunities in skills which had never before been available to them.

When the report under review was being prepared there were more mechanics, painters, carpenters, machinists, radio operators, surveyors, draftsmen, and engineers among the Indian population than in any preceding year.

Only 10 years ago difficult trails and bypaths on the Indian reservations restricted travel and consequently retarded social and economic progress. Day schools were almost impossible; doctors and nurses were able to reach the sick in their homes only after protracted delays and hindrances and sometimes not at all; large tracts of land remained inaccessible; and home and farm services were only partially effective.

During the past year 263 miles of new roads were completed, 184 miles of road were regraded to adequate standards, 278 miles of road were gravel surfaced, and 118 miles resurfaced; 87 major bridges were built. There are now 5,232 miles of serviceable graded roads on 200 reservations in 24 States. There still remain, however, numbers of Indians in inaccessible locations reached only occasionally by the Federal Government's services. Improvements must be made on 6,150 miles of old and nearly impassable roads and trails before urgent requirements are met.

Many of the reservation roads constructed during the past 7 years are connecting links between important Federal and State highways. They form part of the major network of roads available for military transport and provide access to material defensive resources.

Indians are coming to be recognized as competent road builders and a substantial number have recently secured skilled jobs with private contractors and other road-building agencies. The Indian Service road and bridge construction alone has afforded work for as many as 14,000 Indians in the course of a single season. As a consequence, at the present time in this field alone, well-trained Indian mechanics number over 1,300. Numerous road projects are manned entirely by Indian laborers.

In constructing buildings on Indian reservations from 1933 to 1939, about 80 percent of the funds expended for labor was paid to Indians. During these years the earnings of Indians for constructing schools, hospitals, and agency quarters carried on by the Indian Service, are estimated at $7,926,000.

During the past fiscal year, 21 schools, 42 cottages, 12 dormitories, 7 barns, and 4 office buildings were among the 107 Federal structures constructed on reservations. This brought the number of modernized Federal buildings, sponsored by the Construction Division during the past 7 years, to a total of approximately 500.

On the basis of estimates submitted by various superintendents, about 570 more administrative buildings will be needed during the next 6 years, including 62 schools, 35 employees' buildings, 13 hospitals, 224 cottages, and 129 dormitories.

Rehabilitation Measures

The Rehabilitation Division's projects provided under the Emergency Relief Appropriation Acts of 1935, 1937, 1938, and 1939 have been of first importance to the Indians. Although the funds have provided not over an average of 6 months' employment for 2,000 Indians annually, the use of the funds in connection with the coordinated activities of other divisions of the Indian Service has been far reaching.

In aiding the Indians to support themselves, in certain regions the Federal Government faces the problem of complete resettlement of Indian families.

In illustration, numerous Blackfeet Indians moved to Browning, Mont., as there were no job opportunities for them on their outlying reservation lands. Under the rehabilitation program 50 families were settled on irrigated tracts on reservations where they constructed houses and barns, engaged in gardening, and acquired livestock. Additional land for grazing was allotted to them. Some of the families, who had been established for 2 years at the time the report was prepared, had been unusually successful. They had kept their homes in good condition, added to their herds, and fulfilled their credit obligations.

During the last fiscal year, 449 new houses for Indians were built, making a total of 2,482 in the period the rehabilitation program has been in operation. Old houses repaired during the fiscal year covered numbered 872, making a total of 4,540 such houses. Twenty-four community self-help buildings were being constructed and 21 others were being repaired, bringing the total number of Indian self-help buildings aided through emergency funds to 241. During the same year work was undertaken on 65 canning and sewing centers and many other community projects were in operation.

PROGRESS OF INDIAN ARTS AND CRAFTS

IN ORDER to promote a more profitable development of native skills, by an act of Congress the Indian Arts and Crafts Board was created in the United States Department of the Interior in 1936 to educate Indian craftsmen in modern commercial methods, to expand the market for Indian goods, and to protect both the consumer and the Indian craftsmen from cheap imitated articles. The following account of activities under this legislation is taken from the annual report of the Secretary of the Interior, for the fiscal year ended June 30, 1940.

Although the Indian craftsman's individualism has been his chief asset in production, it has been his liability in selling his wares. Original design and execution constitute the charm of Indian arts and handicraft. In marketing his products, however, the lone craftsman has great difficulty in competing with the well-organized sales associations throughout the United States.

One of the main functions of the Arts and Crafts Board has been to instruct the Indians in the methods of modern commercial distribution without commercializing their work.

Preparatory to making specific recommendations to the different tribes as to the best utilization of their handicraft talents, it was necessary for the Board to survey every kind of craft work being done among the Indian tribes in the States and by the natives of Alaska. It was necessary to ascertain whether or not Indian handiwork could be sold in its traditional form or whether it would have to be modified to meet the demands of buyers.

A summary of the data secured in these investigations, published in 1940,[1] reviews North American Indian art from pre-Columbian days and also surveys recent accomplishments.

The next consideration was the commercial market. In the spring of 1940, efforts were made to get the reaction of manufacturers and merchandising experts concerning possible demand for high-class Indian products as practical merchandise.

[1] Valliant, George C.: Indian Arts in North America. New York, Harper & Brothers, 1940.

Articles shown included Choctaw and Cherokee fabrics, Navajo silver, moccasins, and belts from the Plains Indians, ribbonwork from the Oklahoma tribes, and braided sashes from the Eastern Woodlands. The reactions of the merchandising experts were highly favorable and brought immediate orders, in spite of the fact that such orders were not solicited.

Since the volume of quality Indian products in all regions is still too small and too unstable to meet the large demands of most organized business houses, the Board could only carry back to the tribes the results of this inquiry as concrete proof of the existence of a demand and as a means of encouraging local agencies in their efforts to organize quality production.

Plans were laid during the fiscal year under review for the formation of marketing organizations among the Navajo, Pueblo, and Seminole Indians. The Board also assisted in the establishment of a Community Arts and Crafts Center at Sells, Ariz., for the Papagos in southwestern Arizona. By the utilization of tribal moneys and rehabilitation funds of the Indian Service, a building was erected for displaying and marketing art products and handicrafts. A field worker has been assigned to the Papago region, and handicraft production has been undertaken, according to standards which the Board has approved.

The Board has also promoted the demand for Indian goods. Not only through the sponsorship of publications on Indian arts but also through the exhibition of authentic Indian articles and the demonstrations of Indian techniques by the Indians themselves, the Board has opened up a rapidly growing market for the products of Indian talents.

At the Golden Gate International Exposition the largest exhibit of Indian arts and crafts ever assembled was presented by the Board. This exhibit was made practicable through the aid of the United States Commission of the Fair, foundations, and private individuals. Included in the exhibit were the products of Alaskan culture areas and of the seven major Indian cultures of the United States (the Eastern Woodsmen, the tribes of the Plains, the fishermen of the Northwest, the California seed gatherers, the Navajo shepherds, the Pueblo farmers, and the tribes of the Arizona desert).

"The simplicity of line, strength of form, and absence of all extraneous matter in the two model Indian-decorated rooms at the San Francisco Exposition blended so naturally as an effective interior motif for modern homes that the Board was asked to prepare a similar exhibit for the Museum of Modern Art, New York City. Files of specimens and photographs have already been assembled and work undertaken on many reservations." The exhibit was opened in 1941.

Furthermore, the Board has conducted its program of protecting buyers from spurious products by issuing die-stamps or certificates of genuineness for all articles made under conditions which that agency approves. The Government's seal of protection can be used only for

Indian products made under conditions unlike those of a factory system or workshop. In illustration, a Navajo rug has a label on a loose wire sealed against tampering. This label states that the rug was woven on hand looms from hand carded wool. Silver jewelry from the Navajo and Pueblo region is die-stamped to indicate the name of the tribe responsible for hammering and making the hand-wrought article from slug silver.

During 1939–40 the Arts and Crafts Board had in preparation a trade-mark system for quality products in the other less-advanced branches of Indian crafts.

The sale of craft products provides an additional source of income for Indians, which, according to a rough estimate, amounts to approximately $1,000,000 per annum. As the program progresses, it is anticipated that the remuneration of Indians from these arts and crafts will increase greatly within the next few years.

Social Security

PLACEMENT WORK OF PUBLIC EMPLOYMENT SERVICES, JANUARY 1941 [1]

FOLLOWING the usual seasonal pattern, the total volume of complete placements declined 3.8 percent to 363,000 in January.[2] This reduction, however, was far less than the declines between December and January of recent years. Moreover, more than two-thirds of January placements were expected to last longer than 1 month, the highest monthly proportion of regular jobs filled in recent years. As applications for work from claimants for benefits increased sharply, registrants in active files of public employment offices rose to 5,100,000. Despite the increase, this represented the smallest active file of job seekers for any January in the history of the United States Employment Service.

The 363,000 jobs filled in January 1941 was 64 percent higher than in January 1940 and 82 percent higher than in January 1939. The sharp increases over December placements in North and South Carolina were due to jobs filled in connection with construction of cantonments at Fort Bragg, Holly Ridge, and Camp Croft. Decreases from December were reported by 31 States, with practically every State west of the Mississippi showing declines in January. The largest reductions occurred in Louisiana and Mississippi.

Only 8 States showed a smaller volume of jobs filled in January 1941 than in the same month of 1940, but on the other hand, many States filled appreciably more jobs. Exceptionally large gains were shown for South Carolina and Wyoming, where placements were respectively 6 times and 4 times as great as those made in January 1940. At least a doubling of the January 1940 volume was also shown for 8 other States. Supplementary placements, numbering approximately 93,000, registered the first increase since October 1940, a gain of 3.8 percent over December. The increase chiefly reflected the widespread gain in agricultural employment during January.

Applications for work received during January totaled 1,800,000, an increase of more than 22 percent over December. This was the

[1] Prepared by Research and Statistics Division, Bureau of Employment Security, Social Security Board.

[2] Effective with reports for January 1, 1941, public and private placements are not separetely reported because clear distinctions cannot be made.

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largest number of applications for work received in any month since March 1934. In addition to increased use of public employment offices for recruiting labor in connection with the defense program, the rise largely reflects applications for work received from claimants for unemployment-compensation benefits. As a result, the number of job seekers registered for work at the end of January increased 7 percent to approximately 5,100,000. Despite this seasonal increase, the number of registrants in State active files was 16 percent lower than on January 31, 1940, and represented the smallest number of January registrants since the establishment of the United States Employment Service.

The number of job seekers registered in January was lower than in the same month of 1940 in all but 10 States. The decreases were pronounced not only in many industrial States but also in a number of States in which agriculture predominates. In Oklahoma and South Carolina, the number of job seekers was half the previous January's volume and only slightly smaller reductions were shown in Alabama, Connecticut, Rhode Island, and Washington. Of the States having greater numbers of registrants this January than last, Kansas showed the largest increase of 33 percent. Here, as in other States, the increases probably result from an intensification of the recruitment programs, which accompanied efforts to meet the labor needs of the defense program.

During January, 223,000 of the 363,000 compete placements made by the public employment offices were filled by men and 140,146 by women. Placements of men practically doubled those made in January of 1940, while placements of women showed an increase of about one-third. The sharper increase noted in male placements was largely due to the large-scale expansion in construction placements resulting from the needs of the defense program. Placements of men were higher than in January 1940 in all but 7 States and for women in all but 3. Job placements of men were from 2 to 8 times as numerous as in January 1940 in Arkansas, the District of Columbia, Florida, Indiana, Kansas, Kentucky, Missouri, North Carolina, Rhode Island, South Carolina, Tennessee, Virginia, and Wyoming. In only 5 States were increases less than 20 percent. The volume of placements of women doubled in Rhode Island, and increases of more than 50 percent over January 1940 were shown for Arkansas, Montana, and South Carolina. About three-fourths of the jobs filled by men and more than half of the jobs filled by women were expected to last longer than a month.

The number of applications filed by men increased 16 percent over January 1940 to more than 1,300,000 while those filed by women increased 13 percent to 492,000. At the end of January, the active file of men decreased 18 percent from January 1940 to 3,700,000,

while the number of woman job seekers declined 11 percent to 1,300,000. The number of male job seekers registered this January was lower in all except 10 States and in all except 15 for woman registrants.

TABLE 1.—*Summary of Placement Activities of Public Employment Services, January 1941*

[Data reported by State agencies, corrected to Feb. 21, 1941]

Activity	Number	Percent of change from—		
		December 1940	January 1940	January 1939
Total complete placements	363,162	−3.8	+64.4	+82.1
Regular	243,398	+15.9	+105.6	+95.7
Temporary	119,764	−28.6	+16.8	+59.5
Supplemental placements	92,523	+3.8	+171.0	+197.7
Total applications	1,826,414	+22.2	+14.1	+30.3
Active file	5,093,050	+7.0	−16.2	−31.5

Placement activities for veterans in January 1941 totaled 11,558, an increase of 41.4 percent over the previous year and a rise of 11.1 percent from January 1939.

TABLE 2.—*Summary of Placement Activities for Veterans, January 1941*

[Data reported by State agencies, corrected to Feb. 25, 1941]

Activity	Number	Percent of change from—		
		December 1940	January 1940	January 1939
Total complete placements	11,558	−0.1	+41.4	+11.1
Regular	6,989	(1)	(1)	(1)
Temporary	4,569	(1)	(1)	(1)
Total applications	72,834	+14.9	+21.4	+36.9
Active file	235,281	+9.9	−9.7	−35.5

[1] Total veteran placements by duration not reported prior to 1941.

TABLE 3.—*Activities of Public Employment Services, All Registrants, by States, January 1941*

[Data reported by State agencies, corrected to Feb. 21, 1941]

Social Security Board region and State	Complete placements [1]				Supplemental placements	Total applications received		Active file		
	January 1941								Percent of change from—	
	Number	Percent of change from—		Regular (over 1 month)		Number	Percent of change from December 1940	As of Jan. 31, 1941	Dec. 31, 1940	Jan. 31, 1940
		December 1940	January 1940							
Total	363,162	−3.8	+64.4	243,398	92,523	1,826,414	+22.2	5,093,050	+7.0	−16.2
Region I:										
Connecticut	6,996	+6.6	+74.1	4,979	26	28,475	+52.4	55,269	+45.8	−41.4
Maine	1,805	−7.6	+37.7	1,264	15	11,032	−1.6	33,126	+10.9	−6.2
Massachusetts	6,109	−10.4	+64.0	4,350	45	59,960	+25.7	201,297	+23.0	+3.2
New Hampshire	1,663	+8.4	−5.4	1,226	276	8,249	+5.9	19,164	−2.1	−11.3
Rhode Island	1,704	+10.9	+142.4	1,410	7	9,846	+13.2	25,819	−4.6	−42.2
Vermont	883	−22.9	+49.4	547	48	3,059	−6.1	12,442	+1.5	−30.8
Region II:										
New York	33,875	−8.8	+74.1	19,164	1,185	201,946	+2.0	520,208	+2.8	−15.5
Region III:										
Delaware	1,205	+20.6	+49.9	531	15	5,173	+67.0	11,153	+23.7	−22.9
New Jersey	12,466	−3.2	+47.9	8,038	98	67,917	+3.0	209,335	+11.1	−27.0
Pennsylvania	15,117	+2.1	+56.9	10,497	969	142,157	+16.2	391,611	+16.6	−9.5
Region IV:										
Dist. of Columbia	4,971	+9.0	+54.8	2,175	0	17,132	+63.4	28,775	+20.7	−24.9
Maryland	4,684	−12.2	+63.4	3,187	4	23,283	+32.4	52,092	+10.1	−25.9
North Carolina	19,404	+39.7	+282.0	17,515	3,204	67,181	+104.7	112,094	+18.3	+14.5
Virginia	7,259	+3.5	+91.9	5,352	211	21,748	+19.0	47,154	+.6	−23.1
West Virginia	2,672	−17.6	+36.6	1,677	159	22,722	+30.4	63,465	+3.7	−17.6
Region V:										
Kentucky	3,475	−15.2	+120.5	2,737	132	26,749	+79.0	88,934	+5.8	+3.9
Michigan	9,957	−11.8	+35.8	6,761	280	79,675	+24.1	135,814	−12.0	−38.2
Ohio	16,957	+3.3	+63.4	10,052	561	81,743	+21.7	306,099	−.8	+13.9
Region VI:										
Illinois	17,032	+.8	+38.8	10,929	1,072	91,067	+20.6	220,223	+17.6	+9.2
Indiana	9,571	−9.0	+63.9	6,935	527	46,815	+21.5	158,445	+7.8	−15.0
Wisconsin	6,809	−4.4	+38.8	4,200	349	36,534	+37.0	110,689	+9.7	−28.5
Region VII:										
Alabama	3,773	+26.2	+23.4	2,942	209	25,204	+13.8	88,459	−5.7	−41.9
Florida	11,091	−22.2	+184.4	9,880	614	28,298	+6.7	74,977	+4.8	+3.4
Georgia	8,216	+20.4	+44.7	6,131	117	31,693	+8.8	142,546	+1.3	−25.1
Mississippi	2,272	−42.7	−14.9	1,796	66	19,799	+39.4	60,894	+3.1	−20.0
South Carolina	12,258	+90.7	+483.4	11,528	232	23,387	+57.0	50,144	+4.2	−49.6
Tennessee	8,345	+1.9	+130.4	6,705	23,987	24,914	+60.8	116,435	+3.0	−14.4
Region VIII:										
Iowa	4,874	−17.7	−8.7	2,733	582	26,146	+32.2	79,126	+2.1	−21.8
Minnesota	4,019	−14.4	+19.0	2,417	98	32,906	+20.5	112,503	−1.0	−21.4
Nebraska	1,572	−26.3	+1.6	842	22	12,154	+26.0	45,900	+9.2	−10.0
North Dakota	1,418	−32.7	+44.1	634	20	6,587	+56.5	26,944	+9.1	−2.1
South Dakota	894	−18.3	+21.5	343	25	4,499	−2.7	23,038	+6.0	−27.1
Region IX:										
Arkansas	6,359	−26.5	+176.5	3,420	11,075	15,773	+16.0	40,128	−1.9	−35.6
Kansas	5,831	−10.1	+139.6	3,894	595	23,034	−3.2	61,414	−2.5	+32.5
Missouri	11,599	+18.4	+115.5	9,126	521	66,350	+6.3	202,414	+7.2	+8.0
Oklahoma	2,897	−21.2	−3.3	1,386	214	23,738	+51.6	43,007	+8.3	−53.4
egion X:										
Louisiana	5,194	−37.8	+40.1	4,269	638	32,669	+39.4	121,493	+15.1	+15.6
New Mexico	1,012	−28.2	−2.1	690	152	8,584	+41.4	28,599	+12.6	−24.0
Texas	39,937	−10.6	+51.8	24,189	25,640	104,185	+36.7	257,292	+10.5	−10.8
egion XI:										
Arizona	2,516	+11.8	−22.6	1,623	9,104	7,370	+34.8	19,263	+9.4	−23.7
Colorado	2,533	−20.4	+14.2	1,231	65	18,330	+24.6	58,295	+13.2	−11.2
Idaho	1,103	−22.2	+19.0	625	18	10,592	+33.6	20,156	+25.0	+18.3
Montana	684	−29.4	+7.5	426	144	6,637	+49.1	22,980	+20.0	−29.8
Utah	1,451	−8.1	+34.5	494	16	9,201	+37.2	23,540	−7.3	−5.1
Wyoming	1,747	−19.7	+326.1	1,575	19	5,870	+30.2	7,808	+19.3	−28.9
egion XII:										
California	23,997	−7.4	+58.8	13,495	5,907	141,625	+20.9	433,857	+9.1	−25.7
Nevada	821	−8.3	−3.9	442	161	3,112	+31.4	6,062	+3.1	−20.7
Oregon	5,523	+.3	+42.8	3,040	737	23,307	+22.1	42,515	+1.2	−14.3
Washington	4,923	+.3	+9.3	2,984	2,315	34,947	+12.9	70,680	−13.0	−44.5
erritories:										
Alaska	421	+14.4	−8.1	208	27	924	+14.8	1,927	+13.3	−33.4
Hawaii	1,268	+18.1	+57.1	804	20	2,116	+57.8	7,446	+.5	−24.4

Hereafter separate reports of private and public placements will not be presented, as clear distinctions cannot be made.

TABLE 4.—*Activities of Public Employment Services, Veterans, by States, January 1941*

[Data reported by State agencies, corrected to Feb. 25, 1941]

Social Security Board region and State	Complete placements [1]			Total applications received	Active file		
	Number	Percent of change [2] from—			As of Jan. 31, 1941	Percent of change from—	
		December 1940	January 1940			Dec. 31, 1940	Jan. 31, 1940
Total	11,558	−0.1	+41.4	72,834	235,281	+9.9	−9.7
Region I:							
Connecticut	330	+55.7	+22.2	1,326	2,809	+53.2	−37.6
Maine	71	−25.3	−6.6	520	1,895	+12.8	+20.4
Massachusetts	119	−17.9	+9.2	3,860	10,227	+47.5	+40.2
New Hampshire	77	+5.5	−24.5	472	1,024	+26.4	+6.0
Rhode Island	72		+33.3	359	941	+4.8	−13.0
Vermont	24			102	569	+.2	−34.2
Region II:							
New York	647	+1.1	+62.2	3,726	16,091	+4.6	−5.3
Region III:							
Delaware	31			194	470	+32.4	−29.0
New Jersey	215	+18.1	+36.9	2,185	7,584	+17.7	−7.8
Pennsylvania	351	+29.0	+24.9	6,847	18,746	+23.3	+8.8
Region IV:							
District of Columbia	264	+85.9	+210.6	1,122	1,895	+29.5	−13.7
Maryland	183	−22.8	+67.9	793	1,846	+2.4	−41.8
North Carolina	321	−4.5	+154.8	1,773	3,278	+27.9	+34.9
Virginia	175	−21.9	+103.5	469	1,248	−11.9	−26.5
West Virginia	47			784	3,273	−2.0	−14.7
Region V:							
Kentucky	114	−14.3	+119.2	1,062	3,777	+3.7	+6.5
Michigan	391	−9.5	+38.2	3,910	8,164	+19.5	−29.6
Ohio	417	−12.4	+19.5	3,204	16,561	−3.0	+37.1
Region VI:							
Illinois	501	+18.7	−35.5	3,761	11,248	+21.4	+91.6
Indiana	280	+27.8	+118.8	1,898	7,481	+10.4	−28.8
Wisconsin	211	−22.4	+35.2	1,602	8,096	+15.2	−9.3
Region VII:							
Alabama	96	+74.5	+9.1	846	3,732	−6.7	−30.0
Florida	240	−7.7	+215.8	1,058	3,119	+18.0	−5.5
Georgia	148	−45.4	−4.5	944	3,947	+5.6	−31.3
Mississippi	21			445	1,626	−2.6	−7.1
South Carolina	399	+26.3	+576.3	693	1,416	+1.6	−58.8
Tennessee	154	+7.7	+55.6	741	4,365	+4.0	−26.6
Region VIII:							
Iowa	331	−14.9	−18.5	1,423	5,059	+2.3	−15.2
Minnesota	135	−21.5	+10.6	1,310	6,969	+.3	−28.9
Nebraska	52	−49.0	−38.1	659	2,798	+10.5	+17.3
North Dakota	22			176	1,149	+7.1	−9.5
South Dakota	23			213	1,298	+5.7	−28.3
Region IX:							
Arkansas	257	−15.7	+267.1	747	1,880	−3.6	−37.1
Kansas	303	+6.7	+150.4	923	3,722	−3.8	+47.9
Missouri	580	+22.9	+167.3	3,259	10,444	+4.6	+11.0
Oklahoma	103	−3.7	−43.1	1,308	2,680	+11.5	−57.6
Region X:							
Louisiana	109	−35.9	+60.3	857	3,788	+11.6	+15.7
New Mexico	37			387	1,691	+8.2	−15.2
Texas	1,409	+8.2	+72.2	3,256	8,629	+9.3	−5.4
Region XI:							
Arizona	116	+19.6	−13.4	416	1,267	+4.6	−5.2
Colorado	79	−16.8	+5.3	917	2,734	+9.8	−22.6
Idaho	75	−16.7	−14.8	765	1,237	+25.2	+69.7
Montana	66	+10.0		428	1,430	+17.3	−23.4
Utah	39			324	1,201	+6.2	−13.0
Wyoming	145	−18.5		372	465	+6.2	−28.0
Region XII:							
California	1,071	−6.2	+30.2	6,874	23,454	+7.8	−28.1
Nevada	49			199	328	+6.5	−27.6
Oregon	385	+66.7	+6.4	1,203	3,002	+8.6	+7.4
Washington	226	−.4	+14.7	2,029	4,152	−10.6	−41.1
Territories:							
Alaska	18			55	130	+7.4	−33.7
Hawaii	29			47	346	−2.8	−6.0

[1] Hereafter separate reports for public and private placements will not be presented as clear distinctions cannot be made.

[2] Where less than 50 veteran placements were involved in either period the percentage change was not computed.

UNEMPLOYMENT-COMPENSATION OPERATIONS, JANUARY 1941 [1]

ALTHOUGH many more workers were employed in January 1941 than in the same period of 1940, curtailment of activity in seasonal industries and the effects of certain administrative procedures contributed to a sharp increase in claims and unemployment benefits in January from December 1940. Benefits to unemployed workers increased 27 percent to $39,300,000, and claims increased 24 percent to more than 4,900,000. These pronounced increases raised the amount of payments in January to within 4 percent of the amount paid in January 1940, but claim receipts were still 19 percent lower than the number received in January 1940. A minimum of 988,000 unemployed workers received at least one benefit payment and the average number of benefit recipients totaled 826,000 in January as compared with 761,000 and 667,000, respectively, in December. This represented the first increase in the number of beneficiaries since June 1940.

Claims Received

Special reports from State agencies indicated that employment changes in a number of industries contributed significantly to increased claim loads during January. Connecticut reported seasonal lay-offs in construction, textiles, and retail trade. New Jersey reported construction employment curtailed with the completion of many defense projects, as well as lay-offs in textiles and in retail trade. Pennsylvania reported seasonal lay-offs in apparel, textiles, glass, leather goods, fruit-canning, and retail trade. Customary year-end lay-offs occurred in Illinois in retail trade, canning, distilling, meat packing, clothing, auto accessories, radios, and roofing materials, as well as a labor dispute, which resulted in an increased filing of claims. Indiana reported lay-offs in construction, furniture, lumber, and retail trade and the shut-down of a large automobile plant for inventory purposes. Michigan reported temporary lay-offs, largely seasonal in character, in some plants in automobile and related manufacturing, refrigerator and other consumer types of machinery manufacturing, canning, and retail trade. The increase in Ohio was attributable to lay-offs in construction, transportation, and communication, and utilities, retail trade, apparel, food manufacturing, and iron and steel. Alabama reported usual seasonal lay-offs in trade; Florida, curtailed employment in cigar manufacturing; North Carolina and South Carolina, lay-offs in tobacco manufacturing; Iowa, decreased employment in the construction, meat-packing, and produce industries; and Minnesota, in iron-ore mining, water transportation, telephone and other public utilities, and construction.

[1] Prepared by Research and Statistics Division, Bureau of Employment Security, Social Security Board.

Wisconsin reported a large-scale lay-off by one manufacturing establishment for inventory purposes plus seasonal lay-offs of construction workers, stevedores, and retail-trade employees. Oklahoma reported curtailed employment in coal mining, cotton processing, and retail trade. Construction employment was also reduced as a result of inclement weather and the completion of an army cantonment project at Fort Sill. Wyoming reported continuing seasonal lay-offs in industries affected by tourist trade, lumbering, construction, and sugar and cement manufacturing.

Sharply reduced claim loads, on the other hand, were reported by Maine and New Hampshire, where employment in the shoe industry approached its seasonal peak; New Hampshire also reported increasing employment in logging and textile activities.

Increases in the receipts of continued claims (i. e., claims certified for benefit) were widespread, with 46 States handling increased volumes during the month. January claim receipts in Oregon more than tripled those for December, primarily because of the initiation of the uniform benefit-year. Increases of more than 50 percent occurred in Idaho, Indiana, Iowa, Minnesota, Montana, Nebraska, North Dakota, Vermont, and Wisconsin, and 4 other States reported rises of more than 40 percent in continued-claim receipts. Reduced claim receipts were reported by Hawaii, Kentucky, Maine, Massachusetts, and New Hampshire. Continued claims filed to meet waiting-period requirements of State laws increased more sharply than did compensable claims, because of the beginning of new benefit-years by many claimants in certain States.

Seasonal unemployment and the initiation of new benefit-years in certain States resulted in a 24-percent expansion in the January weekly average of continued claims for all types of unemployment. The weekly average of more than 1,000,000 claims filed this month represented the highest volume since August 1940. Forty-seven States reported increases in the weekly average of claim receipts during January. The peak for January occurred in the week ended January 11, when claim receipts reached 1,100,000. This total, incidentally, represented the largest weekly volume since August 31, 1940. In the next 2 weeks of the month, claim receipts dropped off slightly from the midweek high.

For total unemployment, average weekly continued-claim receipts in January approximated 974,000, an increase of 25 percent over the previous month. As with claim receipts for all types of unemployment, this represented the largest weekly average since August 1940. Although weekly changes in claims filed for total unemployment were relatively smaller, the trend of such claims followed the pattern of claim receipts for all types of unemployment. During the week ended January 11, more than 1,000,000 workers filed claims for total un-

employment, the highest number since the week ended August 31, 1940.

Benefit Payments

Most of the States experiencing claim increases had corresponding increases in payments, but in several States benefit payments increased more sharply as claims from December were disposed of. Increased payments were reported in 45 States, and in only 3 were they for less than 10 percent. The sharpest increase—80 percent—occurred in Idaho, and in Oregon and Vermont benefits were more than 60 percent higher than in December. The increase in Idaho was largely attributable to seasonal curtailment of employment in retail trade and lumbering and construction, and in Oregon the increase reflected the initiation of the new uniform benefit-year on January 1. Other sizable increases, ranging from 50 to 60 percent, occurred in Michigan, North Dakota, and South Dakota. Lay-offs in retail trade were common to each and in the Dakotas, seasonal curtailment in meat packing was a contributing factor. Increases exceeded 40 percent in Indiana, Iowa, Montana, Nebraska, New Jersey, Ohio, Tennessee, Utah, and Wisconsin. Among the States in which declines in benefit payments occurred, New Hampsbire reported a reduction of 25 percent and Maine and Missouri each showed decreases of more than 10 percent.

Of the 23 States with at least 3 years of full benefit-payment experience, 8 jurisdictions—California, the District of Columbia, Louisiana, Massachusetts, Minnesota, New York, Utah, and Vermont—paid more benefits in January 1941 than in any previous January. Legislative amendments and changes in administrative procedure which have tended to increase benefit payments, were largely responsible for these peaks.

Although total benefits were only 4.2 percent lower than in January 1940, 32 jurisdictions reported smaller disbursements in January 1941. For the most part, this group included the leading industrial States and those which have been heavily influenced by the defense program, especially in the Southeast, Gulf States, and Southwest. Increases, on the other hand, were concentrated principally among States in the West North Central and Pacific Coast areas where, except for California, defense contracts have been relatively few and seasonal unemployment has been especially pronounced. The sharpest reduction from last year—66 percent—was reported by Hawaii, and reductions between 30 and 50 percent occurred in Alaska, Connecticut, Maryland, Michigan, Rhode Island, Texas, and Wyoming. Declines in excess of 20 percent were also shown in Arizona, New Hampshire, Ohio, Oklahoma, Pennsylvania, and Wisconsin.

The sharpest increase in benefit payments over January 1940 was shown for the District of Columbia, where payments rose 61 percent.

North Dakota and Oregon reported increases of 48 and 41 percent, respectively, and lesser increases occurred in 16 other States. Although payments for total unemployment decreased 5 percent from January a year ago, the amount disbursed for partial and part-total unemployment increased 15 percent, based on 45 States having comparable data for both periods. To some extent, this increase reflects the practice by certain employers, anticipating a growing labor shortage, of reducing hours instead of laying off workers and running the risk of losing their services.

It is apparent that several important factors contribute to the relatively high volume of payments, notwithstanding the current high level of employment:

1. Regular seasonal curtailment of certain activities, as in beet-sugar processing, lumbering, road and other construction, and retail trade.

2. The initiation of benefit payments by 40 States in January of previous years. This resulted in the establishment of benefit-years in that month for many claimants. Consequently, the 12-month interval—January to December—represents one of the most common benefit-year periods. Year after year thousands of unemployed workers, having exhausted their benefit rights, prior to the ending of their benefit-year, are required to wait until January to file a claim initiating a new benefit-year instead of filing one immediately upon separation from employment. As a result, this month tends to approach or actually is the peak of each year. For example, in 1940 initial claims filed in January were higher than those received in any month except April.

3. Distortion, by defense activities, of the customary seasonal pattern of employment in many lines of industry. Construction, for example, was maintained at an exceptionally high level during the late fall and early winter months because of military construction and new plant additions. Slackening in employment of construction workers occurred later than usual, so that some claims that would ordinarily be filed in October and November were being filed in January.

4. The fact that, although the lay-off rate has decreased in recent months, the actual number of workers affected has remained relatively high. Upon separation from employment, many of these workers have probably filed claims for benefits.

Unemployed workers received compensation for more than 3,700,000 weeks of unemployment during January, of which 3,300,000, or 90 percent, represented weeks of total unemployment. The number of weeks of partial and part-total unemployment compensated in January totaled 394,000, an increase of 14 percent over December 1940. Increases were shown in 38 of the 47 States which issue such

payments. At least a fourth of all weeks of unemployment compensated in Delaware, Illinois, Indiana, Maine, and New Hampshire were for partial and part-total unemployment.

Beneficiaries

Marking the first rise since June 1940, the average number of claimants receiving benefits increased sharply in January to 826,000, an increase of 24 percent over December. Of the 43 States reporting expansions, the largest—84 and 60 percent—occurred in Idaho and South Dakota. Increases ranging from 40 to 60 percent were reported by Indiana, Iowa, Nebraska, North Dakota, and Tennessee, and between 30 and 40 percent by 11 other States. Of the remaining States, only 4 showed increases of less than 10 percent. Fewer recipients were reported in only 8 States, with the sharpest reduction (28 percent) shown for New Hampshire. Declines ranging to as much as 18 percent were shown for Alabama, the District of Columbia, Georgia, Hawaii, Kentucky, Maine, and Missouri. Increased industrial activity because of defense contracts was partly responsible for the decreased number of beneficiaries in most of these States.

Statistics of Operation

Table 1 shows the continued claims, the weeks compensated, and the benefits paid, by States, for the month of January 1941. Table 2 shows the weekly trend of continued claims, by States, from December 21, 1940, to January 25, 1941.

TABLE 1.—*Continued Unemployment Compensation Claims* [1] *Received, Weeks Compensated, and Benefits Paid, by States, January 1941*

[Data reported by State agencies, corrected to Feb. 21, 1941]

Social Security Board region and State	Continued claims [1]			Weeks compensated			
	Number	Type		Number	Type of unemployment		
		Waiting period	Compensable		Total	Partial and part-total combined [2]	Partial only [2]
Total	4,930,669	1,208,300	3,722,369	3,737,483	3,343,126	394,357	.....
Region I:							
Connecticut	48,457	16,935	31,522	28,948	25,005	3,943	(3)
Maine	36,019	3,946	32,073	33,448	24,337	9,111	7,048
Massachusetts	219,051	39,082	179,969	204,726	175,467	29,259	27,764
New Hampshire	19,134	4,734	14,400	14,649	10,682	3,967	(3)
Rhode Island	36,465	5,160	31,305	31,305	25,259	6,046	(3)
Vermont	15,903	6,119	9,784	9,233	8,528	705	543
Region II: New York	810,829	160,945	649,884	691,664	691,664	(3)	(3)
Region III:							
Delaware	10,920	2,959	7,961	7,910	5,206	2,704	2,571
New Jersey	209,794	73,144	136,650	133,355	133,355	(3)	(3)
Pennsylvania	402,002	130,836	271,166	273,998	273,998	(3)	(3)
Region IV:							
District of Columbia	26,178	4,997	21,181	19,616	18,470	1,146	(3)
Maryland	50,988	5,693	45,295	42,209	33,577	8,632	8,470
North Carolina	78,442	18,057	60,385	62,782	58,466	4,316	3,869
Virginia	46,465	5,655	40,810	42,996	37,832	5,164	3,979
West Virginia	41,508	10,716	30,792	29,661	27,809	[4] 1,852	(3)
Region V:							
Kentucky	27,970	4,260	23,710	42,922	34,612	8,310	(3)
Michigan	126,132	34,478	91,654	103,666	97,361	6,305	(3)
Ohio	265,323	78,466	186,857	191,813	157,921	33,892	(3)
Region VI:							
Illinois	330,256	46,725	283,531	281,925	194,481	87,444	69,045
Indiana	93,039	26,988	66,051	65,856	49,533	16,323	(3)
Wisconsin	68,321	32,265	36,056	36,116	33,335	2,781	1,279
Region VII:							
Alabama	64,511	16,309	48,202	46,659	43,530	3,129	1,691
Florida	47,405	12,466	34,939	35,905	30,472	5,433	(3)
Georgia	51,502	14,716	36,786	36,681	34,352	2,329	1,326
Mississippi	32,395	6,478	25,917	24,284	22,218	2,066	1,361
South Carolina	35,440	9,436	26,004	25,745	22,486	3,259	1,804
Tennessee	89,126	17,714	71,412	66,640	59,377	7,263	3,767
Region VIII:							
Iowa	73,524	32,846	40,678	40,134	35,403	4,731	1,211
Minnesota	139,810	33,713	106,097	94,416	87,354	7,062	(3)
Nebraska	31,132	8,882	22,250	21,845	20,026	1,819	1,072
North Dakota	12,059	3,617	8,442	7,541	7,016	525	292
South Dakota	8,891	1,968	6,923	6,517	6,263	254	(3)
Region IX:							
Arkansas	44,483	13,443	31,040	31,040	28,981	2,059	124
Kansas	37,905	16,812	21,093	20,624	18,037	2,587	1,636
Missouri	116,024	46,946	69,078	62,319	51,657	10,662	5,638
Oklahoma	45,987	13,929	32,058	31,270	26,114	5,156	1,011
Region X:							
Louisiana	83,193	17,015	66,178	65,247	59,137	6,110	(3)
New Mexico	15,248	2,904	12,344	10,854	10,210	644	264
Texas	129,862	18,793	111,069	81,192	66,886	14,306	(3)
Region XI:							
Arizona	12,408	3,338	9,070	8,872	8,346	526	28
Colorado	39,022	8,315	30,707	30,319	27,744	2,575	1,414
Idaho	35,087	10,569	24,518	21,507	20,583	924	(3)
Montana	43,779	11,590	32,189	28,902	28,902	(3)	(3)
Utah	22,216	3,742	18,474	18,380	16,534	1,846	348
Wyoming	10,387	3,331	7,056	6,162	5,367	795	439
Region XII:							
California	554,921	99,871	455,050	453,937	389,817	64,120	47,604
Nevada	13,577	2,969	10,608	10,166	9,350	816	379
Oregon	66,279	31,463	34,816	26,333	23,463	2,870	2,128
Washington	104,937	31,211	73,726	71,416	63,266	8,150	(3)
Territories:							
Alaska	3,434	903	2,531	2,034	1,901	133	0
Hawaii	2,929	851	2,078	1,744	1,436	308	300

See footnotes at end of table.

TABLE 1.—*Continued Unemployment Compensation Claims* [1] *Received, Weeks Compensated, and Benefits Paid, by States, January 1941*—Continued

Social Security Board region and State	Benefits paid				Month and year benefits first payable	Amount of benefits since first payable [4]
	Amount [3]	Type of unemployment				
		Total	Partial and part-total combined [2]	Partial only [2]		
Total	$39,270,163	$36,637,515	$2,594,848			$1,383,200,875
Region I:						
Connecticut	278,262	254,159	23,723	(2)	January 1938	22,832,696
Maine	215,286	162,527	52,758	$40,547	do	11,244,365
Massachusetts	2,012,117	1,850,464	160,615	151,397	do	79,911,902
New Hampshire	117,809	98,036	19,746	(5)	do	6,703,320
Rhode Island	315,799	286,250	29,549	(5)	do	23,234,424
Vermont	89,670	85,743	3,815	2,705	do	2,399,096
Region II: New York	8,174,792	8,174,792	(2)	(2)	do	274,322,740
Region III:						
Delaware	61,303	46,053	15,202	14,409	January 1939	1,615,123
New Jersey	1,259,862	1,259,862	(2)	(2)	do	32,131,106
Pennsylvania	2,958,812	2,958,812	(2)	(2)	January 1938	173,367,318
Region IV:						
District of Columbia	236,265	222,933	12,646	(5)	do	5,439,625
Maryland	352,536	305,313	47,154	46,103	do	22,905,433
North Carolina	295,156	281,714	13,389	11,408	do	17,469,519
Virginia	340,482	311,482	28,984	21,354	do	16,326,839
West Virginia	254,978	235,009	19,969	(5)	do	20,462,696
Region V:						
Kentucky	303,998	265,304	37,095	(5)	January 1939	9,928,002
Michigan	1,202,392	1,167,811	34,581	(5)	July 1938	105,410,640
Ohio	1,795,918	1,613,298	167,374	(5)	January 1939	50,044,795
Region VI:						
Illinois	3,227,045	2,589,004	632,239	465,383	July 1939	63,574,933
Indiana	626,902	538,917	87,600	(5)	April 1938	36,589,363
Wisconsin	379,411	359,714	19,697	8,295	July 1936	19,984,620
Region VII:						
Alabama	308,710	292,447	15,784	7,822	January 1938	17,489,061
Florida	351,250	314,220	37,030	(5)	January 1939	10,215,836
Georgia	244,667	235,305	9,362	5,666	do	7,918,711
Mississippi	157,988	147,004	10,964	7,166	April 1938	5,216,825
South Carolina	168,696	153,382	15,213	8,096	July 1938	5,381,715
Tennessee	471,115	436,933	34,182	17,590	January 1938	17,390,693
Region VIII:						
Iowa	366,590	339,196	27,028	6,094	July 1938	12,163,309
Minnesota	982,409	926,411	55,998	(5)	January 1938	26,486,953
Nebraska	200,852	187,551	13,281	7,586	do	3,344,101
North Dakota	74,290	70,180	4,063	2,286	do	1,238,119
South Dakota	48,813	47,195	1,618	(5)	do	816,631
Region IX:						
Arkansas	187,487	179,530	7,955	503	do	4,977,741
Kansas	183,104	166,165	16,939	10,076	do	4,497,940
Missouri	533,936	481,636	52,246	23,894	do	13,253,925
Oklahoma	286,908	255,202	31,706	4,434	December 1938	8,306,460
Region X:						
Louisiana	579,271	533,834	44,515	(5)	January 1938	17,250,233
New Mexico	96,250	91,351	4,899	1,939	December 1938	2,545,568
Texas	633,911	560,187	73,407	(5)	January 1938	30,606,195
Region XI:						
Arizona	94,445	90,651	3,794	178	do	4,828,514
Colorado	303,309	283,940	19,305	10,076	January 1939	7,937,428
Idaho	247,033	239,605	7,418	(5)	September 1938	4,819,859
Montana	322,215	322,215	(2)	(2)	July 1939	4,234,350
Utah	199,913	187,008	12,905	2,707	January 1938	6,020,544
Wyoming	76,995	70,076	6,919	3,379	January 1939	2,449,664
Region XII:						
California	6,256,550	5,675,443	576,722	415,994	January 1938	133,487,767
Nevada	134,150	125,690	8,460	3,778	January 1939	2,066,857
Oregon	330,207	301,643	23,013	16,583	January 1938	14,388,596
Washington	887,194	816,405	70,789	(5)	January 1939	16,485,788
Territories:						
Alaska	29,208	27,843	1,365	0	do	906,093
Hawaii	13,902	12,070	1,832	1,765	do	576,844

[1] I. e., certification that the claimant has completed a waiting-period week or a compensable period (usually a calendar week or 7-day period).

[2] Benefits for partial and part-total unemployment are not provided by State law in Montana, New York, and Pennsylvania. In New Jersey provision for such payments is not effective until Apr. 1, 1941.

[3] Includes supplemental payments, not classified by type of unemployment.

[4] Adjusted to exclude returned and voided benefit checks except for January.

[5] Data for partial unemployment included with data for part-total unemployment.

[6] Payments for part-total and partial unemployment are made for benefit periods of 1 quarter. The number of weeks represented by each such payment is determined by dividing the amount paid by the claimant's benefit rate for total unemployment.

TABLE 2.—*Trend of Weekly Continued Claims [1] Received for All Types of Unemployment,[2] by States, for Weeks Ending in January 1941*

[Data reported by State agencies, corrected to Feb. 20, 1941]

Social Security Board region and State	Weekly average [3]			Claimants (in thousands) for benefits,[1] week ending—					
	December	January		Dec. 21	Dec. 28	Jan. 4	Jan. 11	Jan. 18	Jan. 25
		Number in thousands	Percent of change from December						
Total	882.3	1,093.1	+23.7	878.9	852.9	1,023.7	1,132.6	1,124.1	1,091.9
Region I:									
Connecticut	8.1	10.2	+25.4	8.0	7.5	8.7	10.4	10.6	11.0
Maine	10.3	8.4	−18.5	9.3	8.5	8.9	9.5	8.0	7.1
Massachusetts	48.8	52.9	+8.5	45.2	51.3	57.7	54.4	51.1	48.5
New Hampshire	6.2	4.6	−26.3	5.2	5.4	4.8	5.3	4.1	4.1
Rhode Island	7.8	8.0	+3.4	9.0	7.5	8.6	7.9	8.0	7.7
Vermont	2.2	3.5	+57.8	2.1	2.5	3.2	3.6	3.7	3.3
Region II:									
New York [4]	154.2	177.9	+15.4	155.3	156.2	169.7	183.9	180.8	177.3
Region III:									
Delaware	1.7	2.3	+30.3	2.0	1.4	1.6	2.2	2.4	2.8
New Jersey [4]	32.3	45.1	+39.5	32.0	35.8	40.9	44.6	47.2	47.6
Pennsylvania [4]	68.0	92.1	+35.4	61.8	65.9	95.2	102.2	86.4	84.3
Region IV:									
Dist. of Columbia	4.7	5.1	+8.6	4.7	4.4	3.1	5.4	5.8	6.1
Maryland	10.4	11.4	+10.0	10.1	9.6	11.7	11.9	11.4	10.7
North Carolina	14.6	18.9	+29.3	15.0	10.4	22.1	19.4	17.0	17.2
Virginia	9.7	11.0	+13.2	10.7	8.6	11.5	13.2	9.9	9.5
West Virginia	8.5	9.2	+7.9	8.5	8.5	9.4	9.5	8.8	8.9
Region V:									
Kentucky	6.2	5.8	−6.5	6.6	4.3	7.0	5.2	5.7	5.2
Michigan	21.4	28.1	+31.4	22.5	21.0	23.6	25.0	31.4	32.6
Ohio	47.7	58.6	+22.9	46.4	47.5	51.4	65.3	60.4	57.4
Region VI:									
Illinois	58.2	73.0	+25.4	57.6	52.3	65.1	82.4	76.0	68.5
Indiana	13.4	21.2	+58.6	14.5	11.8	16.1	24.4	23.8	20.5
Wisconsin	9.6	15.1	+57.0	9.7	10.0	11.7	14.2	18.6	15.8
Region VII:									
Alabama	12.9	14.6	+4.9	13.4	10.6	15.4	15.1	14.4	13.2
Florida	8.2	11.2	+37.1	7.8	9.2	12.0	12.9	10.4	9.7
Georgia	10.5	11.2	+6.2	10.4	8.7	10.2	11.6	10.5	12.3
Mississippi	5.8	6.9	+19.9	5.8	5.9	6.5	7.0	7.0	7.2
South Carolina	6.1	8.2	+34.1	6.4	3.2	8.8	8.6	6.9	8.5
Tennessee	14.6	21.0	+43.7	15.1	9.1	22.9	22.2	20.5	18.5
Region VIII:									
Iowa	9.2	15.7	+69.9	9.5	9.9	12.0	15.8	17.2	17.9
Minnesota	20.8	27.6	+32.5	23.8	21.5	22.4	25.5	31.5	31.1
Nebraska	4.1	6.6	+59.8	4.4	4.6	5.3	6.6	7.2	7.5
North Dakota	1.6	2.5	+59.9	1.6	1.8	1.9	2.4	3.1	2.9
South Dakota	1.4	1.9	+37.2	1.5	1.5	1.7	2.0	2.0	2.1
Region IX:									
Arkansas	7.4	9.9	+34.6	8.3	5.1	9.2	10.4	9.7	10.3
Kansas	6.5	7.9	+20.7	6.7	6.3	7.2	7.1	8.8	8.3
Missouri	24.4	25.0	+2.5	23.2	21.0	21.6	26.4	26.4	25.4
Oklahoma	7.9	10.0	+26.5	7.9	7.3	8.8	9.9	10.4	11.1
Region X:									
Louisiana	15.9	18.7	+17.9	16.6	15.5	17.3	19.6	19.9	18.0
New Mexico	2.8	3.3	+16.7	2.8	2.7	3.1	3.3	3.3	3.5
Texas	27.6	28.7	+3.9	27.4	26.5	26.9	28.5	29.7	29.5
Region XI:									
Arizona	2.6	2.8	+7.0	2.5	2.6	2.5	2.9	2.8	2.8
Colorado	6.6	8.5	+29.0	6.6	6.5	7.4	8.0	9.2	9.3
Idaho	4.6	7.4	+59.6	5.0	4.8	6.2	7.1	8.1	8.3
Montana [4]	6.4	9.2	+44.1	6.5	6.9	7.2	8.8	10.2	10.7
Utah	4.0	4.9	+20.7	4.0	4.0	4.4	5.1	5.2	4.9
Wyoming	1.7	2.2	+32.8	1.7	1.7	1.8	2.3	2.3	2.7
Region XII:									
California	101.1	122.6	+21.6	101.2	100.9	111.8	122.9	129.4	126.1
Nevada	2.2	2.8	+29.2	2.0	2.4	2.4	2.8	3.0	3.0
Oregon	5.0	14.4	+191.6	4.8	4.4	12.9	11.6	17.1	16.1
Washington	15.0	23.7	+57.4	14.3	16.7	20.4	25.9	25.5	23.9
Territories:									
Alaska	.7	.7	+5.4	.8	.6	.8	.7	.9	.4
Hawaii	.7	.6	−17.6	.7	.6	.7	.6	.4	.6

[1] I. e., certification that the claimant has completed a waiting-period week or a compensable period (usually a calendar week or 7-day period).

[2] Includes claims for total, part-total, and partial unemployment.

[3] Computations based on whole numbers.

[4] Benefits for partial and part-total unemployment are not provided by State law in Montana, New York, and Pennsylvania. In New Jersey provision for such payments is not effective until Apr. 1, 1941.

WISCONSIN UNEMPLOYMENT-INSURANCE LAW AND EMPLOYMENT STABILIZATION

THE theory on which the Wisconsin unemployment-insurance law—the first State law to be passed—was based, was that the prospect of securing a reduced contribution rate through the establishment of individual employer's reserves would be an incentive to employers to regularize employment. The debate between the proponents of the pooled-fund and the individual-employer reserves types of systems is no longer so important, but there is still a considerable difference of opinion as to whether or not employment stabilization may be promoted through the variation of contribution rates under the experience- or merit-rating provisions of State unemployment-insurance laws. A recent report [1] published by the Federal Bureau of Employment Security presents the first independent analysis of the results of experience rating.

Present discussion of the subject revolves largely around the question of experience rating in pooled, or partially pooled, fund laws. As late as January 1940, 39 State and Territorial unemployment-compensation laws (in addition to Wisconsin), including 32 of the pooled-fund laws, had provision for some form of experience rating. In most of these States rate reductions will not be possible before 1941 or 1942, whereas in Wisconsin employers qualified for lower rates in January 1938.

Provisions of Wisconsin Law

Under the Wisconsin law which was passed in 1932 and made effective in 1934, benefit liability began (for a majority of the employers covered by the act) on July 1, 1936, or 2 years after contributions became payable. The standard rate of contributions was 2 percent of pay rolls from July 1, 1934, to January 1, 1938, when the rate was raised to 2.7 percent. The law provided originally that rate reductions for individual employers should depend upon the amount of the employer's reserve per employee, but it was amended to provide that rate reductions should depend upon the size of the employer's "reserve percentage," which was defined as the percentage that an employer's net reserve balance (excess of contributions over benefits) at the end of a calendar year formed of his "defined" pay roll for that year. If this reserve percentage amounted to 7.5 percent but was less than 10 percent, the rate to which an employer would be entitled for the next calendar year was 1 percent of his pay roll; and if the figure was 10 percent or more, no contributions would be required of him in the following year. Amendments to the law, made in the

[1] Federal Security Agency. Bureau of Employment Security. Memorandum No. 10: Employment Stabilization and the Wisconsin Act, by Charles A. Myers. Washington, 1940.

years 1937 to 1939, provided for an increase from $130 to $195 in the maximum amount of benefits that could be drawn by a worker in a 52-week period, and extended the coverage of the law from employers of 8 or more, to 7 or more in 1938, and 6 or more in 1939. Other amendments provided for denial of partial benefits to employees with a benefit rate of $5 or less; for increase in the waiting period for partial-unemployment benefits from 1 to 3 weeks per employee; and for exemption of the canning industry from the payment of partial-unemployment benefits during the active canning season.

Another important change made in 1937 was the establishment of a "balancing account" from which benefits would be paid to laid-off employees of employers whose reserve accounts were exhausted. This fund, the establishment of which was a partial concession to the pooled-fund principle, was to be built up from all net interest earnings on the total fund, from the balance remaining in accounts no longer subject to the act, and from other minor sources.

The provisions affecting employee eligibility for benefits are of importance in connection with employer practices, as an employee cannot be considered eligible for benefits from an employer's account until he has been employed by that employer for 4 weeks or more (on at least 12 working days) or on a monthly salary basis for more than a month. Among the excluded employments are students regularly attending established educational institutions if they had been employed only during vacations or outside of school hours for not more than 4 hours of any full school day, as well as persons who have been self-employed for at least 30 of the 52 weeks preceding their lay-off by an employer.

Scope of the Study

The field work for the study was carried out between July 1, 1937, and July 1, 1938, and involved interviews with 247 Wisconsin employers representing all important lines of business and every significant industrial area in the State. Data published by the State Unemployment Compensation Department, which showed employer contributions as compared with benefit payments, were used for the purpose of selecting the firms to be visited; in each major subclassification employer account numbers were chosen which had very high or very low benefit-contribution ratios, as it was thought that differences in stabilization efforts might account for the differences in benefit experience between firms in the same line of business. The account numbers thus chosen were then traced to the particular firms and formed the largest part of the number interviewed. To this list was added a group of about 30 firms which had stated in letters to the Wisconsin Manufacturers' Association that they had attempted some measure of stabilization as a result of the stimulus given by the act.

Later in the year 1937–38, special attention was paid to those firms which had qualified for reduced contribution rates at the beginning of 1938, and those which had overdrawn their reserve accounts by March 31, 1938. The greatest emphasis was placed on manufacturing industries in the study, as there is in general more opportunity for stabilization in these industries. Of the 247 firms interviewed, 214 (88.6 percent) were in manufacturing, while the remaining 33 (13.4 percent) were in retail or wholesale trade, service industries, and the construction industries. The findings of the study were limited to a certain extent by the comparatively small number of firms studied; by the difficulty of assessing accurately all stabilization claims, chiefly because of inadequate data; and by the fact that the experience in Wisconsin was still too limited to draw any long-run conclusions. Business conditions had changed rapidly during the period covered, from greatly increased business activity in the early summer of 1937 to an acute depression in the late fall and winter of 1937–38. However, these changing conditions afforded an opportunity to observe the reaction of employers toward stabilization in two contrasting phases of the business cycle.

Meaning and Tests of Stabilization

No precise definition of the term "employment stabilization" was attempted in the study. It has been considered by some writers to mean continuous employment of the same work force for the same number of man-hours per pay-roll period over a year or longer, while others interpret the term to mean the same-sized work force over a period of time without regard to whether the same or different workers were employed.

The only measure of stabilization provided by the Wisconsin law is the reserve percentage—that is, the percentage that the balance in the employer's reserve account at the end of a calendar year is of that year's total defined pay roll (in 1939 the law was amended to substitute a 2-year, and after 1940, a 3-year average pay roll for the single year's pay roll). The theory underlying this provision is that the condition of the individual employer's account accurately reflects his benefit experience, and, by implication, the regularity or stability of his employment. The employer's contribution rate varies, within certain limits, in proportion to his reserve, and since the amount of benefits drawn by his workers directly affects the size of the reserve, if an employer can so manage his work force as to reduce benefits, even though this does not result in more stable employment, this will be given equal weight under the law with a real attempt to regularize employment. The reserve percentage may be increased by extreme work spreading which avoids lay-offs and the payment of benefits;

this, however, should not be considered as genuine stabilization, but rather as a stabilization of underemployment. Insofar as work spreading was used merely to keep workers at such a level as to make them ineligible for benefits, it was not regarded as a measure of stabilization in the study.

Because of objections to the different definitions or tests of stabilization, the evaluation of stabilization efforts was put on a relative basis and, wherever possible, statistics of employment, and in some cases man-hours and labor turn-over, were secured and examined graphically for any significance. If the trend of these curves was more regular after July 1, 1936, when benefit liability began, than before that date, it was assumed that employment had been stabilized to some degree, although this tentative conclusion was later discarded if it was shown that the regularity was due solely to extreme work spreading rather than manufacturing for stock, transfer between departments, and other stabilization measures. The statistical data were supplemented, therefore, by the field investigation which weighed the employer's initial statement as to measures he had or had not taken in the light of the firm's employment and benefit experience.

In classifying employer stabilization efforts, four general groups were adopted to indicate the degree of stabilization achieved as a result of the act by each of the firms interviewed. These were "appreciable," "some," "negligible," and "none." The last three were then subdivided again to take account of differences between individual employer activity within each of these groups.

Summary and Conclusions

It was found that, although the individual employer in many lines of business can do something to stabilize his employment, his ability to do so is often limited. The type of unemployment which can be reduced by the individual employer is mainly the intermittent or seasonal type. Among the employers who attempted to stabilize employment as a result of the law, employment was usually centralized and the working force selected with greater care. Employees were transferred between departments to avoid lay-offs and there was some retraining, and in some cases employees for whom there was not enough work were put on maintenance and repair work. Where possible, some firms manufactured for stock during slack seasons, thus reducing lay-offs and the hiring of many extras at peak periods. Other stabilization devices, less frequently used, were diversification of products and markets, and booking business in advance of the season.

The prospect of a financial saving through a reduced contribution rate was an incentive with all the firms which had attempted some measure of stabilization and it appeared evident that this reduction

in charges had assumed a psychological importance out of proportion to its relative financial significance. However, "the incentive provided under the reserve-percentage formula of the present law may be considerably weakened after a time because firms in naturally stable industries are able to qualify for the lower rates with very little effort on their part, whereas firms in relatively unstable industries may never be able to reach the necessary levels even though they make a more genuine effort to stabilize than do their competitors in the same industry." This is regarded by the author as a real objection to the reserve-percentage type of experience rating, both in the Wisconsin law and in most other State laws which provide for contribution-rate variations.

In addition to work spreading, which about half of the firms had practiced in varying degrees, in some cases other means of benefit avoidance, such as probationary-period hiring and the hiring of ineligibles, had been practiced. These practices indicate that a law which rewarded the employer who had a low-benefit record would encourage attempts such as these within the framework of the statute.

In 1938, 114 firms received reduced rates either because their 1937 pay rolls were smaller than in previous years, thus automatically increasing their reserve percentages, or because they made a voluntary contribution before the end of the year in order to bring their reserves up to the necessary percentage of pay roll. During this first year stabilization efforts were unimportant in qualifying for lower rates.

The study showed that only 27, or about 11 percent, of the firms interviewed had achieved what was regarded as appreciable stabilization; however, 104, or 43 percent, of these firms obtained rate reductions in 1939. Of the firms found to have accomplished "appreciable" or "some" stabilization as a result of the act, 47 percent obtained rate reductions in 1939; whereas 57 percent of those who had done little or nothing to stabilize, because they had done so before or because their businesses were naturally stable, obtained rate reductions. In contrast to these, 36, or 38 percent, of the firms which reported that they could do little to stabilize because of difficulties inherent in their business were assigned increased rates, while 24, or 27 percent, of the firms in this group obtained rate reductions. This limited analysis indicates that the first extensive application of experience rating in Wisconsin rewarded firms which had done little or nothing to stabilize under the act, as well as many of the firms which had accomplished some stabilization as a result of the act.

Although some stabilization has been achieved under the influence of experience rating in Wisconsin, against this must be placed the fact that it has tended to stabilize underemployment and has added somewhat to the volume of total unemployment. To the extent that stabilization efforts have meant that fewer workers were needed at peak

periods and the hiring of casual labor has been discouraged, the total number of unemployed has tended to increase. Underemployment in Wisconsin has been the result of increased work spreading, and had occurred in about half of the firms studied. The report states that "to the extent that its use is widespread, extreme work spreading may enable employers to qualify for lower contribution rates just as much as if they had accomplished genuine stabilization, which approaches full-time employment. This is not an inherent defect in the Wisconsin law, however, since an amendment raising the level at which partial benefits are payable would set a higher limit on work spreading, and at the same time allow some sharing of the work which may be desirable to prevent temporary cessation in employment and income."

In conclusion it is stated that although many of the claims made when the law was passed have not been realized, there has been greater concern shown by employers with employment problems and many have made genuine efforts to reduce or eliminate intermittent and seasonal irregularity of employment. Since some degree of stabilization has been secured and no workers have yet been denied benefits because of exhaustion of their former employer's accounts, the Wisconsin Unemployment Insurance Act, it is said, should be accepted as a significant contribution to social legislation. "It may not be better than or even as good as experience rating under pooled-fund laws in encouraging employer efforts to stabilize employment, but the final answer must await further experience under the pooled-fund laws and under the Wisconsin act."

Cooperation

ELECTRICITY COOPERATIVES IN 1940

Summary

THE rural-electrification program dates from 1935 when Congress authorized the disbursement of $100,000,000 for extending electrification in rural areas. It was specified that, although loans might be made to private power companies, preference should be given to cooperatives and to municipal or other public systems. Some 45 to 50 cooperative electricity associations had been in existence before the REA program was started, but under the impetus of public encouragement and funds, the number expanded rapidly.

A report recently issued by the Rural Electrification Administration[1] reveals that by September 1940, some 672 cooperatives in 42 States had been granted loans. On these authorizations, funds had been paid to 640 associations in an amount aggregating $217,327,546. Altogether, the 672 associations for which loans had been earmarked had contracted for an estimated 286,535 miles of line. The miles of line put into operation by 585 associations numbered 232,749, and 579 of these were serving a total of 571,077 patrons.

The greatest amount of funds advanced had gone to the cooperatives in the States of Texas, Minnesota, Iowa, Indiana, and Illinois, in the order named. These States also led as regards mileage under loan contract.

Naturally, the miles of line in operation and number of consumers served are directly related to the length of time the program has been under way in the various parts of the country. For this reason, when the States are ranked on these two factors, a considerable change is seen in the group of the five leading States. For mileage energized, the leaders are Texas, Minnesota, Indiana, Iowa, and Georgia; and for number of consumers served, Indiana, Georgia, Texas, Tennessee, and Ohio.

The 525 cooperatives for which income data were received had a combined gross revenue during the year 1939–40 amounting to $16,620,607. Net income of $5,917,099 was reported by 517 of these. At the end of June 1940, only 291 owed payments on the interest and

[1] U. S. Department of Agriculture. Rural Electrification Administration. Financial and operating statistics of all systems to which REA had made allotments as of September 30, 1940. Washington, [1941].

principal of the REA loans; these amounted to $2,504,353—a sum well within the net earnings figure.

An indication of the extent to which these associations are furnishing employment is given by the fact that, for the year 1939–40, the pay roll of the 492 associations for which data on this point were obtained amounted to $2,740,451.

Funds Advanced on REA Loans

The amount of loans that had been advanced to 640 cooperative associations by the end of September 1940 is shown in table 1, by States. All but 6 States are represented in this table. Of the States not shown, no loans had been authorized for cooperatives in Connecticut, Massachusetts, or Rhode Island. Loans had been made for Nebraska, Nevada, and New York, but in the first two States these had gone to public power districts and in New York, to a private power company.

TABLE 1.—*Number of REA Associations in Receipt of Loans and Amount Advanced, September 30, 1940*

State	Number of associations	Funds advanced	State	Number of associations	Funds advanced
All States	640	$217,327,546	Missouri	32	$9,325,397
			Montana	12	2,060,641
Alabama	17	4,984,102	New Hampshire	1	371,569
Arizona	1	395,794	New Jersey	2	414,900
Arkansas	13	4,279,147	New Mexico	4	711,801
California	3	1,053,816	North Carolina	21	5,355,077
Colorado	12	2,869,757	North Dakota	5	1,655,016
Delaware	1	775,608	Ohio	25	12,233,809
Florida	6	1,385,457	Oklahoma	18	5,675,519
Georgia	37	11,781,524	Oregon	9	1,035,615
Idaho	6	2,089,455	Pennsylvania	12	6,634,322
Illinois	26	13,020,244	South Carolina	13	1,813,739
Indiana	43	14,931,354	South Dakota	5	1,018,483
Iowa	47	15,322,513	Tennessee	12	6,955,651
Kansas	19	4,501,608	Texas	60	17,793,344
Kentucky	23	7,429,199	Utah	1	289,541
Louisiana	12	2,450,482	Vermont	2	319,635
Maine	2	172,680	Virginia	13	5,787,034
Maryland	2	673,548	Washington	10	2,515,758
Michigan	13	10,293,974	West Virginia	2	530,034
Minnesota	41	16,004,724	Wisconsin	27	12,081,005
Mississippi	21	6,831,120	Wyoming	9	1,503,550

Expansion of Services

Table 2 gives, by States, the estimated number of miles of line covered by loan contract, the mileage constructed and energized (i. e., put into operation), and the number of consumers served.

TABLE 2.—*Miles of Line Under Contract and Energized, and Consumers Served by REA Cooperatives, September 30, 1940*

State	Mileage under loan contract		Line energized		Consumers served	
	Associations reporting	Miles (estimated)	Associations reporting	Miles	Associations reporting	Number of customers
All States	672	286,535	585	232,749	579	571,077
Alabama	17	7,733	17	6,914	17	17,479
Arizona	1	269	1	[1] 98	1	[1] 196
Arkansas	13	6,089	13	5,523	13	11,451
California	3	743	3	745	3	1,661
Colorado	14	4,470	9	2,797	9	5,811
Delaware	1	972	1	837	1	2,007
Florida	8	2,247	5	1,695	5	3,282
Georgia	40	16,547	36	15,453	35	42,530
Idaho	7	2,358	5	1,906	5	4,009
Illinois	26	16,830	26	14,197	26	31,989
Indiana	43	18,806	41	16,604	41	46,529
Iowa	46	19,734	44	16,208	44	32,002
Kansas	21	7,973	18	5,452	18	8,882
Kentucky	23	8,379	23	8,535	23	22,413
Louisiana	12	3,683	11	3,096	11	7,530
Maine	4	635	2	158	2	334
Maryland	2	811	2	628	2	1,695
Michigan	13	9,065	13	8,374	13	22,410
Minnesota	41	20,214	34	16,786	34	33,427
Mississippi	22	10,518	21	9,020	21	29,446
Missouri	32	12,820	30	11,350	26	19,610
Montana	13	2,649	11	2,082	11	4,740
New Hampshire	1	957	1	127	1	239
New Jersey	2	426	2	352	2	1,163
New Mexico	4	733	3	626	3	1,073
North Carolina	25	9,915	17	5,248	16	14,294
North Dakota	5	2,354	5	1,514	5	2,865
Ohio	25	13,767	25	12,980	25	36,413
Oklahoma	19	8,605	18	6,981	18	12,164
Oregon	13	2,004	5	444	5	1,570
Pennsylvania	12	7,613	12	5,946	12	21,986
South Carolina	17	5,083	7	2,286	7	6,051
South Dakota	6	2,010	4	715	4	1,347
Tennessee	12	6,932	9	5,830	10	37,484
Texas	63	27,294	53	20,406	53	42,142
Utah	1	433	1	277	1	777
Vermont	3	714	2	205	2	539
Virginia	13	6,381	12	5,821	12	14,066
Washington	12	3,816	7	2,255	6	1,424
West Virginia	2	505	2	427	2	1,024
Wisconsin	25	11,879	25	10,557	25	22,156
Wyoming	10	1,573	9	1,294	9	2,867

[1] Estimated.

The REA report, from which the data here were taken, points out in connection with the expansion of electrical service:

> New mileage is being energized at a rapid rate. This new mileage materially affects operating and income relationships. Seasoned mileage will show consumers, consumption, and revenue per mile several times [as large as the] comparable data for newly energized mileage. * * * As the weighted average age of all REA-financed systems is only 1.2 years, the systems are all subject to the qualification that age will bring marked increases in consumers, consumption, and revenues, as well as in other operating income, and expense items.

The following statement shows the number of consumers served by REA cooperatives at the end of each fiscal year since the rural electrification program went into effect: [2]

	Consumers connected
1935–36	693
1936–37	19,611
1937–38	104,528
1938–39	268,242
1939–40	567,998

Whereas only 10.9 percent of the farms in the United States were electrified on December 31, 1934, by the end of June 1940 the percentage had risen to 27.1, an increase of 151.6 percent.[2]

Income and Pay Roll, 1939–40

Income and pay roll are shown, by States, in table 3. Of the 517 associations for which data were obtained as to net income, only 22 sustained a loss for the year and, of these, 13 had been in operation only part of that period. For the whole group of associations, net earnings amounted to more than twice the amount due in loan interest and principal. In only five States (Maine, New Jersey, South Dakota, Washington, and West Virginia) were the net earnings insufficient to meet these payments.

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[1] Data are from U. S. Department of Agriculture. Rural Electrification Administration. Annual report for year ending June 30, 1940.

TABLE 3.—*Income and Pay Roll of REA Cooperatives, Year Ending June 30, 1940*

State	Total income		Net income		Interest and principal due		Pay roll	
	Number of associations	Amount	Number of associations	Amount	Number of associations	Amount	Number of associations	Amount
All States	525	$16,620,607	517	$5,917,099	291	$2,504,353	492	$2,740,451
Alabama	12	305,910	12	83,238	5	52,652	10	55,325
Arkansas	10	178,610	9	32,893	7	25,022	9	46,649
California	2	76,019	2	18,031	2	15,616	2	26,606
Colorado	8	180,317	8	39,091	3	14,111	8	36,633
Delaware	1	57,810	1	24,118	1	11,249	1	8,968
Florida	4	73,408	4	18,917	------	------	4	17,837
Georgia	33	997,396	33	369,375	22	140,700	31	160,541
Idaho	5	141,931	5	30,483	2	22,923	5	43,267
Illinois	24	754,455	24	290,621	6	73,567	24	141,218
Indiana	39	1,175,257	36	436,632	20	257,150	37	201,266
Iowa	45	1,230,542	45	501,475	26	198,726	45	200,521
Kansas	16	191,740	16	39,053	5	24,132	16	44,011
Kentucky	22	676,024	22	276,109	12	67,965	21	119,852
Louisiana	10	212,800	10	65,316	4	26,375	10	41,853
Maine	1	7,115	1	[1] 236	1	382	1	2,805
Maryland	2	50,722	1	21,571	1	8,568	1	9,138
Michigan	13	644,226	13	174,805	8	92,148	13	174,495
Minnesota	32	1,452,150	33	620,083	26	258,651	33	185,103
Mississippi	21	695,191	21	247,084	9	39,754	12	64,895
Missouri	15	388,623	13	86,316	11	48,553	13	75,169
Montana	10	175,765	10	46,122	8	36,397	10	37,662
New Hampshire	1	787	1	[1] 168	------	------	------	[2]
New Jersey	2	38,717	2	8,139	2	14,081	2	10,184
New Mexico	3	76,720	3	14,175	1	3,081	3	18,632
North Carolina	14	268,867	13	82,942	5	32,713	13	54,555
North Dakota	4	95,479	4	32,322	2	23,274	4	16,568
Ohio	24	1,168,219	24	383,407	18	190,735	24	218,442
Oklahoma	17	370,192	17	98,623	7	70,872	17	78,827
Oregon	4	50,234	4	14,883	3	5,744	4	11,709
Pennsylvania	11	482,375	11	205,264	7	111,475	11	83,260
South Carolina	3	36,856	3	11,363	2	9,914	3	7,313
South Dakota	3	43,207	3	9,686	3	18,324	3	10,558
Tennessee	10	1,495,457	10	646,776	10	88,075	------	[2]
Texas	50	1,129,582	50	364,566	18	103,965	50	229,612
Utah	1	15,706	1	8,664	------	------	1	2,275
Vermont	2	12,369	2	2,111	------	------	2	2,141
Virginia	10	460,325	10	189,163	6	115,262	10	80,658
Washington	4	137,163	4	30,417	3	32,068	4	33,831
West Virginia	2	15,768	2	[1] 6,144	1	2,995	2	7,899
Wisconsin	26	956,603	26	359,666	18	243,086	26	164,164
Wyoming	8	99,970	8	33,599	6	24,048	7	16,004

[1] Loss.
[2] No data.

EUROPEAN COOPERATIVES AND THE WAR

Summary

THE totalitarian State is by its very nature antagonistic to the cooperative movement, as cooperation means democratic organization and freedom of choice and action. Therefore, as the continent of Europe has been more and more dominated by the totalitarian governments, cooperatives in the conquered countries have been confronted by increasing difficulties—in some cases by virtual extinction, and in almost all by an unfriendly atmosphere. As a result, it appears that, although full information is still lacking, the cooperative movement in many of the conquered countries is now in serious straits.

In every country of Europe the cooperative movement continued to obtain new members and even expand its business, up to the moment of invasion or outbreak of war. However, the years 1939 and 1940 were disastrous for European cooperatives, for those years witnessed the absorption of Czechoslovakia into Germany, and of Estonia, Latvia, and Lithuania into the U. S. S. R.; the dismemberment of Poland; the occupation of Belgium, Denmark, part of France, Netherlands, and Norway; and the tearing away of large parts of Finland and Rumania. In those countries the cooperative movement was either destroyed or lost a large part of its membership, property, and resources.

In the three European aggressor countries—Italy, Germany, and the Soviet Union—cooperatives either have been suppressed or have been absorbed into the State. The natural tendency of these countries, in taking over neighboring territories, has been to mete out to the cooperatives there the same treatment given to associations in their own country.

In Germany the consumers' cooperatives have had the hostile attention of the Nazis since before the latter came into power. The Nazi Government, while sparing to a great degree the agricultural cooperatives, has pursued a policy of repression toward consumers' cooperatives. This has been carried on by three general steps: (1) By forbidding the formation of new associations or opening of new branches, (2) by amalgamating all associations in a locality into one, and (3) by carrying out a systematic policy of dissolution as fast as the cooperatives' assets could be realized upon.

The first two of these measures have been invoked also against the consumers' cooperatives in the countries which have been absorbed into the Reich (Austria and Czechoslovakia) and in occupied France. In the Soviet Union, where the whole network of urban cooperatives was dissolved and the stores taken over as State enterprises in 1935,

the same procedure was followed for cooperatives in the Polish territory taken by Russia. It is not known whether the same treatment has been accorded to the cooperatives in Estonia, Latvia, and Lithuania—countries absorbed into the U. S. S. R. in July 1940.

For the occupied countries (Belgium, Denmark, Netherlands, and Norway) little or no information regarding the present status of the cooperative movement is available. However, because of the large part played by the cooperative movement in the distribution of supplies to the people there, it is believed that the cooperatives have been allowed to continue, at least temporarily.

The Finnish cooperatives in the territory ceded to the Soviet Union simply abandoned their property and followed the Finnish population in its migration into what remained of Finland. The cooperatives in Finland, as well as those in France, Poland, and Great Britain, have suffered enormous losses through destruction of their property in the war; and in Finland and France there was also the added burden of caring for refugees from occupied zones.

Officials and prominent members of cooperatives have in many cases been forced to flee for their lives. Among them have been cooperators from Spain, France, Czechoslovakia, Finland, and Poland. The International Cooperative Alliance established a fund, to which affiliates all over the world contributed, and from this fund relief payments were made as long as the money lasted. The cooperatives of Great Britain accepted numbers of these refugees—especially the Czechoslovaks—into their employment, as have also to a less extent the Canadian cooperatives.

International cooperative trade, which had been growing slowly for several decades and was assuming substantial proportions, was cut off entirely after the invasion of Belgium and Holland and the capitulation of France. The head of the International Cooperative Trading Agency, Inc., is now in the United States, in the service of one of the cooperative wholesales.

Even in countries still functioning under independent governments, war conditions have made operation more difficult for cooperatives as well as for all other business enterprises. Difficulties of export of products and of importation of raw materials and finished goods, and government regulation of supplies, have been encountered. In countries a large part of whose commerce was in foreign trade—such as the Scandinavian countries and Finland—the agricultural cooperatives carrying on an export business and the productive departments of consumers' cooperatives have suffered from the diminution or cessation of shipping.

Alone, of all the European countries, the cooperative movement in Hungary has benefited from the war, by the additional cooperatives

and the natural resources in the new territory added to the Hungarian State.

In all of the countries where the cooperative movement is still allowed to function it is playing an important part in supplying the needs of the people and in helping to regulate prices. In Hungary the central cooperative organization has been given the task of enforcing the Government regulations for export and import trade, and in Norway and Sweden the central cooperative organizations have been given representation on Government bodies formed to deal with war problems.

It is of interest to note that in the midst of war conditions and the great physical difficulties resulting from the destruction of property, the dislocation of public services, and the personal danger, the British cooperators have found time and energy to establish a National Wages Council for the cooperative movement and to subsidize new cooperative courses and study groups.

Belgium

Precise information regarding the Belgian cooperative movement is lacking, since the occupation of the country by the Germans. The People's Year Book for 1941 states, however, that "there is good reason to believe that the organizations at Brussels continue to function." This is the second time that the Belgian cooperators have seen their country occupied by invading Germans. During the intervening quarter century since the World War, the Belgian cooperative movement has been greatly consolidated and strengthened. In many localities cooperators represent one-fourth or more of the population. The insurance association of the cooperative and labor movements, "La Prévoyance Sociale," is the leading insurance institution in the country. For many years a large proportion of its earnings has been devoted to the establishment and maintenance of sanitariums and of homes for aged and children.

The whole cooperative movement, which has a membership of about 580,000 (out of a population of some 8,250,000) has accounted for about 10 percent of the entire retail trade of the country.

Czechoslovakia

Prior to the seizure of the Sudeten area in October 1938 there were two groups of associations in the consumers' cooperative movement in Czechoslovakia—those composed of Czechoslovaks and those composed of Germans. Each of these groups of cooperatives had its own wholesale association and there was a good deal of rivalry between them, although they worked together when the movement was threatened, as by harmful legislation. Altogether, there were in

Czechoslovakia some 816 consumers' cooperatives (with a combined membership of 805,544), of which 654 were affiliated with one or the other of the central organizations. Their combined business in 1937–38 amounted to 203,798,000 Swiss francs.[1]

When the Germans occupied Sudetenland, all the German associations were seized and their assets sold by the German authorities. The cooperative officials there were obliged to flee and many went into exile abroad. The wholesale association was liquidated on July 24, 1939.

The Czech associations continued to operate until March 1939, when a protectorate was established in Bohemia and Moravia. At that time the whole cooperative movement, as well as the entire Czech economy, was incorporated into the German system. A process of amalgamation of associations took place by which all local associations in any town or district were merged into one large association, and a great many associations were closed down altogether. It is reported that the premises of about 300 were handed over to private dealers. The associations which remained were, at last reports, managing to carry on in some fashion.

Denmark

All phases of the cooperative movement have been well developed in Denmark, and about one-third of the population are members of a cooperative association. The consumers' movement, composed of about 1,900 small associations, forms a countrywide network which accounted for about 11.5 percent of the total retail trade of the nation in 1938. The agricultural movement handled from 30 to 95 percent of the various farm products and the export and import trade handled by cooperatives was as high as 91 percent of some commodities. As the business of the agricultural cooperatives was so intimately concerned with import and export trade, this branch of the cooperative movement early in the war began to be adversely affected by the British and other restrictions, Great Britain having taken the bulk of Denmark's exports. Notwithstanding, the cooperatives managed to hold their own. The distributive movement, which had been growing rapidly, was affected by the quotas on imports of goods handled by them, as these quotas (based on earlier years' business) failed to allow for later increases. The cooperative wholesale, to which 1,850 consumers' cooperatives were affiliated, operated more than 20 productive plants of various kinds. Its margarine factory, which produced about a fifth of the whole supply of the country, had to cease operations in April 1940, owing to inability to obtain raw materials.

The Nazi invasion, in the same month, completed the destruction of Denmark's principal foreign market besides demoralizing the domestic market and sources of supply. No statistics are available

[1] Exchange rate of Swiss franc in 1938=22.9 cents.

as to the effect of all these events upon the business of the cooperative movement. The People's Year Book, 1941, expresses the opinion that "in view of the important part which cooperation played in the general economic life of the country, it would seem safe to assume that * * * much of its machinery and many of its services will have been maintained as vital to the well-being of the country."

Estonia, Latvia, Lithuania

No data are available, for the Baltic States of Estonia, Latvia, and Lithuania, as to what modifications of cooperative structure have taken place since their incorporation into the Soviet Union. The cooperative movement of Estonia—a small and almost entirely agricultural country—had attained a powerful influence in the national economic life. The sales of the consumers' associations alone amounted to nearly half of the amount of the entire Government budget, and represented some 24 percent of the total trade in Estonia. In Latvia, however, as a result of the change from a parliamentary to a totalitarian form of government in 1934, the cooperative movement had to a great extent lost its voluntary character and become State-controlled. The two former cooperative unions were dissolved and their place was taken by a central organization (membership in which was compulsory) which was largely a State enterprise. The Lithuanian cooperative movement had flourished, but the consumers' cooperatives were of only secondary importance, as the country was predominantly agricultural.

Finland

In Finland, which has been termed "the land of cooperation," the consumers' cooperative movement handles one-third of the total retail trade and well over a third of the wholesale trade of the country—a proportion unsurpassed in any other country.

There are two branches of the consumers' cooperatives in Finland. One, the "neutral" movement, is composed largely of village and rural associations; the other, the "progressive" movement, is mainly in the big towns and industrial centers. Both are neutral politically, but the "neutral" section interprets this very strictly, whereas the "progressive" section collaborates with those parties (particularly the Labor Party) which are friendly toward the cooperative movement.

Both sections of the movement had been progressing rapidly, and the year 1939 showed considerable gains over 1938, even though during the last 3 months of the year the country was on the defensive against threatened Soviet invasion. At the end of 1939, the 127 cooperatives affiliated to K. K. (so called from the initials of its name), the "progressive" league of associations, had a combined membership of 323,100 and total sales for the year amounting to 2,256,900,000

Finnish marks.[2] During the year 222 new stores and restaurants had been opened, bringing the total to 2,534. The 418 associations affiliated to Y. O. L., the central "neutral" organization, had 317,700 members, 3,612 shops, and a year's business aggregating 3,208,000,000 Finnish marks.

This development was interrupted by the outbreak of war in September 1939. The threat of Russian invasion in October 1939 resulted in a large proportion of the cooperative employees, as well as almost all cars and horses, being drafted into the army. Enemy bombing raids disturbed the operations of associations in the war zone and by the end of the year 156 cooperative stores and 14 restaurants had had to be closed.

The war continued for 3 months in 1940 and ended with terms requiring the cession to the Soviet Union of about 11 to 12 percent of the entire land area of the country. In the ceded area the plants of 9 "progressive" associations were abandoned altogether and part of those of 7 other associations, as were also 250 stores and 20 restaurants. In addition, 21 productive plants belonging to retail associations, as well as several factories and a new warehouse and office building belonging to the wholesale, were also abandoned. The "neutral" branch of the movement lost more than 450 distributive and productive enterprises serving some 43,000 members and having a business amounting to 395,000,000 Finnish marks annually.

Over 500,000 persons, formerly living in the ceded area, migrated into the remaining portion of Finland, necessitating heroic efforts in order to provide for their needs and their absorption into employment. Among them were a great many industrial workers who had been members of "progressive" cooperatives and who immediately joined the cooperative association in the town of their new residence. Thus, the progressive movement did not fare so badly as the neutral movement. Both are reported as considering themselves "capable of handling the situation with the resources at their disposal."

The cooperative movement as a whole, however, suffers from the ills that beset the whole country. A great many commodities are hard to get and certain articles (such as are imported) have disappeared from the market entirely. Summer droughts in many places burned up the harvest, and the fruit crop of 1940 was a failure. Lack of petroleum and coal has caused some hardship, but Finland has great forests which can supply a substitute for coal, and the automobiles have been equipped with wood-gas generators.

War conditions in the surrounding countries have cut Finland off almost entirely from the rest of the world. As about 40 percent of the national revenue came from the export trade, this is a great hardship. The only port left to her is the Arctic port of Petsamo, which is about

[2] Exchange rate of Finnish mark for 1939=1.99 cents.

300 miles from the nearest railroad station and is connected with the rest of Finland by "only a wilderness road."

Because of these conditions a rationing system was adopted and the Government has imposed maximum prices on a number of articles. Quality has been lowered. The cost of living has gone up 25 to 30 percent, whereas wages have increased only about 10 percent. Because of the scarcity of goods the cooperatives have changed their price policy and, instead of selling at current prices, have inaugurated a "supply price policy"—i. e., the association's normal gross margin is added to the amount the goods cost the association, to make the retail selling price. In this way these associations have exercised to a considerable degree a restraining influence on the retail price level. New shops are being built in the frontier area to replace those burned or bombed during the war.

The cooperative movement has to a great extent been able to go back to its normal activities, resuming the regular membership meetings, educational work, etc. Because of the scarcity of housing accommodations, the "progressive" section has started cooperative construction of dwellings in various parts of the country.

France

The cooperative movement in France was very highly developed. The consumers' cooperatives numbered some 1,000 in 1938 and had a membership of about 2,500,000 members and annual sales of about 3,500,000,000 francs.[3] The greatest part of the business was accounted for by 39 large regional associations, known as "development societies," each serving an entire district. Most of these were in northern France.

Although the consumers' cooperatives and their wholesale at Paris suffered a great deal in 1939 from the effects of wartime regulations and scarcity of certain essential commodities, the movement was holding its own and even increasing its productive output. Even as late as the beginning of May 1940, the managing director of the wholesale told the annual meeting of delegates that the wholesale's turnover since the beginning of the year had been increasing at the rate of about 20 percent over 1939, partly as a result of rising prices and partly as a result of intensive cooperative efforts. He stated that he "faced the future with great confidence" for the development of the cooperative movement.

Less than a month later the German armies had cut off the whole northern section of France from the rest of the country. All of the regional cooperatives in that section had to close, and they and other associations had their premises destroyed by bombardment. The wholesale association lost its footwear factories at Amiens and

[3] Exchange rate of franc in 1938=2.88 cents.

Lillers. Many of the directors and members became refugees, abandoning all their belongings. Aid of various kinds was extended by the National Cooperative Federation to them, as well as to the Belgian refugee cooperators, but shortly thereafter Federation officials were obliged to flee from Paris to Tours, since which time no direct word has been heard from them. According to a Swiss journal, La Coopération, the cooperative movement is being subjected to what is described as "a great work of regrouping, unification, and purification," in the course of which all associations in a single town are being consolidated and at least some of the veteran cooperative leaders are being "permitted to retire."

Germany

Prior to the Nazi régime the German consumers' cooperative movement was one of the most successful in Europe. In 1932, just before seizure of power by the National Socialist Party, there were in affiliation with the two principal cooperative federations about 1,200 local associations with 3,650,000 members and an annual business of over 1,095,000,000 Reichsmarks.[4] Although the movement, like other economic enterprises in Germany, had passed through revolution, collapse of the currency, and a long-continued depression, followed by social and political strife, it had nevertheless been able not only to hold its own but even to expand.

Even before the Nazis came into full power they showed their antagonism in many ways, fomenting attacks by private traders in which considerable damage was done to the cooperatives' business premises and bringing pressure upon members to withdraw from the association. Such attacks were later made officially by storm troopers, to such an extent that the resulting loss of business and demands for withdrawal of capital endangered the financial safety of the cooperatives. On May 15, 1933, an order was issued by which the whole network of consumers' associations was taken over by the leader of the German Labor Front.

The agricultural, traders', and artisans' cooperatives were not attacked, for they were for the most part composed of the middle-class people from whom the Nazis drew their support.

By a series of orders over the next 2 years many associations were dissolved altogether, the two central federations were amalgamated and lost their cooperative character, and what remained of the former cooperative distributive system lost its voluntary and democratic aspects. Elected cooperative leaders were replaced by Nazi "Commissars" whom the associations were forced to "elect." Finally, on May 21, 1935 a decree was issued providing for the dissolution of the movement and its funds as rapidly as possible. Since that time

[4] Exchange rate of Reichsmark in 1933=30.52 cents.

the establishment of new consumers' cooperatives has ceased altogether. Statistics on number of associations also show a decline in credit, handicraft, housing, and agricultural associations. From 1935 through 1938 the number of members of cooperative associations fell from 3,255,000 to 1,954,000. No later data are available.

Great Britain

According to a report by the International Labor Office, "the war has hampered the British cooperative movement in every sphere." Not only have Government rationing and price regulations, as well as the increasing problems connected with the import of commodities, made the work of the cooperatives more difficult, but these difficulties have been accentuated by the loss of employees called to the colors and by the physical problems of carrying on the production and distribution of goods in spite of the disorganization caused by the wartime destruction of plant and transportation facilities.

However, the cooperative movement is automatically granted representation on all Government committees in which its interests are involved. Through its participation in the work of committees dealing with supplies and prices, the movement is in a position to exert an influence in favor of the interests of the general body of consumers.

By working out a system of mutual aid among the cooperative associations, those in relatively quiet areas have come to the aid of those in the bombed regions. When the headquarters building of the Coventry association—the largest retailer of food in the city—was destroyed, as well as a bakery, drug warehouse, and a garage, its 39 branches were open as usual ("some without windows, some without roofs"); and the cooperative's deliverymen made their deliveries as usual, even though in some cases they had to climb piles of debris 10 feet high to get through to their customers, and though more than a score of the association's trucks were destroyed. Neighboring associations rushed in supplies of bread, and the Cooperative Wholesale Society sent in canned stuff and other necessaries such as candles.

Describing the manner in which cooperators carried on during the terrible bombing raids over London, in September 1940, the president of the London Cooperative Society noted that the clerical staff continued "in full swing," doing the work incident to the distribution of £450,000 [5] in patronage refunds ("everybody seems to realize that this cooperative distribution of the trading surplus is twice blessed in these hazardous and necessitous times"). "Miracles of organization" were performed, although the telephone exchange was out of commission. In the cooperative laundry, whose packing room had

[5] Exchange rate of pound sterling in September 1940=$4.03.

been bombed during the night, the machinery was "in full motion and no one appeared to be perturbed." The ovens in the bakery not only carried on the baking for the cafe, but also cooked the meat for the families in the neighborhood.

Identity cards are accepted as evidence of cooperative rights, in the case of members (bombed out or evacuated to other sections of the country) who have lost their share books. These are honored by associations in the new place of residence.

Notwithstanding the increased difficulty of operation, the cooperative movement had been able at the end of the first year of war to increase its membership to 8,643,238 persons. It was estimated that between a fourth and a third of the whole population obtained their food from the cooperative stores. A further increase in membership took place in 1940. Total retail cooperative sales for 1939 amounted to £272,293,748, or about 3½ percent over those of the previous year. Nearly 243,750 persons were employed in the movement at the end of 1939. A National Wages Council, for the cooperative movement, was established shortly after the outbreak of the war. All matters relating to labor conditions in cooperative employment are taken up through this council. Two war bonuses were given to employees, in February and September 1940. Other matters handled by the council during 1940 were the payment for time during air raids, and establishing the conditions governing the replacement of men by women in cooperative service.

Although the war "has inevitably led to a severe diminution in the amount of educational activities," wartime home-study courses were started at the Cooperative College at Manchester, and the Cooperative Wholesale Society made grants to aid employees' classes and groups wishing to pursue studies in cooperative subjects.

Cooperative associations have subscribed generously to Government securities. Altogether, almost £80,000,000 of these have been taken by cooperatives, without interest.

Hungary

The cooperative movement of Hungary is the only one, in all the countries of Europe, of which it can be said that the political and social upheavals resulting from the war have actually worked for its benefit.

In Hungary the cooperative movement centers in the Union of Hungarian Cooperative Societies. Its cooperative wholesale, "Hangya" (meaning "The Ant") not only supplies the affiliated retail societies but, with its subsidiary marketing and export associations, plays an important part in the country's exports. A large part of the exports organized by the Government is carried on by either "Hangya" or its exporting association, "Futura."

As a result of war conditions the Hungarian Government imposed stringent restrictions on exports and on profits from export operations. "Hangya," whose network of affiliated associations covers the entire country, was made supervisor to see that the regulations were carried out and was given an export monopoly on certain agricultural products. Its services were also utilized in regulating retail prices.

During 1939 the number of affiliated associations rose from 1,490 to 1,783, largely as a result of the annexation of former Czechoslovak territories, north of Hungary, where there were many cooperatives. Seven branch warehouses were opened by the wholesale to serve these associations. In the Carpatho-Ruthenia region a new retail cooperative with 50 stores was started for the benefit of the population there.

According to a report from the wholesale,[6] "apart from the increase in membership, great advantages have been derived from the fact that the forests and mines of these territories are again supplying Hungarian consumers with timber and minerals, especially salt, all of which had to be obtained by import for the previous 20 years."

When the large consumers' cooperative in Budapest, founded by industrial workers, was on the point of failure as a result of long-continued depression conditions, "Hangya" took it over. Under its guidance the assets were saved and the business operations maintained during liquidation. A new association, formed to take its place, is operating under the wholesale's supervision. "In this way the union has considerably increased its membership among the industrial working classes, and is now in a position to bring about very close economic collaboration between the different classes of the population."

From 1938 to 1939 the business of the wholesale rose 29.6 percent to a total of 127,569,299 pengö.[7] This did not include sales of agricultural produce for cooperatives in the Provinces, amounting to 84,489,000 pengö. The output of its productive departments rose 53.4 percent, to 11,352,734 pengö.

Netherlands

In the Netherlands there are two main branches of the cooperative movement. One of these centers is the Central Union of Consumers' Societies, an open-membership organization, and the other is the Federation of Diocesan Unions of Catholic Cooperative Societies which, as its name implies, is limited to Catholics. The first of these has some 130 affiliated associations with about 216,000 members, and the Catholic federation has about 120 affiliates with 40,000 members. The Netherlands Central Bureau of Statistics reported that in Janu-

[6] Quoted in Review of International Cooperation (London), June 1940.

[7] Exchange rate of pengö in 1939=19.24 cents.

ary 1939 there were 351 consumers' cooperatives in Holland, with a total membership of 297,445.

Because of the depression and of legislation tending to restrict the formation of new cooperatives, the distributive cooperative movement has expanded only slowly in recent years. Significant developments, however, took place in the field of medical care. Thus, in July 1939 the consumers' cooperative association "De Volharding" (meaning "perseverance") opened a hospital for the care of its members; the sick fund department of this association at that time had 82,000 members. At the beginning of 1940 the cooperative wholesale "De Handelskamer" and the cooperative sick funds throughout Holland (having an estimated membership of 4,000,000) collaborated in the formation of a cooperative wholesale to supply the fund's hospitals and dispensaries with drugs. Record sales, aggregating over 30,000,000 florins,[8] were achieved by "De Handelskamer" in 1939.

No direct word has been received by the International Cooperative Alliance as to the effect of the German invasion in May 1940, upon the cooperative movement.

Norway

The greater part of the consumers' cooperatives in Norway are members of the Cooperative Union and Wholesale of the Norwegian Consumer's Societies (termed "N. K. L." from the initials of its name in Norwegian). This union has been in existence about 30 years and, especially during the past 10 years, has made remarkable progress. In 1939 it gained 11,800 new family members—the greatest increase in 20 years. Altogether 608 associations were affiliated with it, their annual business aggregating about 196,200,000 kroner,[9] an increase of 7 percent over the previous year.

In 1939, also, the wholesale department of N. K. L. attained a new high—62,600,000 kroner—of which 24,400,000 kroner represented goods produced in its own factories. The outbreak of war found the wholesale well prepared, carrying about five times its usual stocks, and it was therefore able to carry on its usual services. Its local member associations, because of the topography of the country and resulting difficulties of transportation, have always had to rely greatly upon local products in some lines and the larger ones have bakeries, slaughterhouses, and other productive works of their own.

Soon after the hostilities began, N. K. L. pointed out in a communication to its members that the cooperative movement, because of its growth, could exert a decisive influence on prices. From the beginning N. K. L. was given representation on a large number of central

[8] Exchange rate of florin in 1939=53.34 cents.
[9] Exchange rate of krone in 1939=23.23 cents.

price-control committees and similar representation was given on local price committees to its affiliated local associations.

Latest reports indicate that the cooperatives continue to function in all parts of the country.

Poland

The Polish cooperative movement has always been characterized by a multiplicity of small associations. Under a law passed in 1934 there was a considerable amount of amalgamation by which the movement was decidedly strengthened, and the Polish Government was given powers of interference "which, on the whole, it appeared to have exercised wisely."

Both the agricultural and consumers' branches made rapid progress in the years preceding the war. At the beginning of 1939, about 3½ million members—or (with their families) nearly 40 percent of the population—belonged to cooperative associations. "Spolem," the central union of consumers' associations, included 1,776 local associations with over 400,000 members and an annual business of 170,000,000 zloty.[10] The union's wholesale department was the largest commercial enterprise in Poland.

It is reported that after the invasion of the country in September 1939, "notwithstanding the cruelty of the war and the terrible destruction of the country, the majority of the directors of the cooperative organizations remained at their posts."

In the subsequent division of Poland among Germany, Poland, and the Soviet Union, the cooperatives which had headquarters in Warsaw lost the greater part of their members and resumed their activities only with the greatest difficulty. Cooperatives may be said to have ceased to exist in the western Provinces which were incorporated in the Reich; in the other German-occupied Provinces (including Cracow and Warsaw) a certain measure of autonomy was allowed and there the cooperatives have continued to operate, under the close supervision of the occupation authorities. In the Soviet-occupied territory the urban societies were dissolved (as they were elsewhere in the Soviet Union some years ago), but a certain amount of freedom was left to the agricultural cooperatives. In Vilna, which was ceded to Lithuania, the Polish cooperatives were "forced to liquidate in favor of Lithuanian organizations."

Rumania

Since 1903 the Rumanian cooperative movement has been subject to various kinds and degrees of governmental control and interference under a series of laws.

[10] Exchange rate of zloty in 1938=18.86 cents.

The movement has consisted of a great number of associations, largely on a nationality basis. Thus of 1,144 consumers' cooperatives reporting for 1938, 774 were composed of Rumanians and the other 370 were of minority nationalities. The position of the consumers' associations had steadily improved since 1936, but the number of supply and sale associations, forestry associations, and land purchase and renting associations (long a characteristic type of Rumanian cooperation) was decreasing.

The Rumanian cooperative movement also lost a very active part of its membership with the loss of Bessarabia, South Bukovina, North Transylvania, and South Dobrudja to the Soviet Union.

Sweden

The Swedish consumers' cooperative movement is perhaps best known for its services to consumers by successfully combating the trusts which had maintained high prices for a number of necessaries.

Since the onset of war, through its central organizations it has continued to act as price regulator. Early in 1939, before the stringent blockade, the cooperative wholesale foresaw difficulties in obtaining supplies from abroad, and imported goods in such quantities that special ships had to be chartered for their transport. The Swedish Government created a number of committees to deal with special problems arising from war conditions—export and import regulation, rationing, transportation, industrial reorganization, etc.—and the cooperative movement has been given representation on all.

The year 1939—the latest year for which data are available—showed an increase in cooperative membership of 34,740. This was the greatest increase in any year since the World War year of 1916. It is expected that 1940 will show an equally large increase. The business of the retail associations and the retail subsidiaries of K. F., the wholesale, amounted to 618,000,000 kronor in 1939.[11] The wholesale's business increased by more than 17 percent, to 269,400,000 kronor.

Switzerland

It is estimated that one of every eight persons in Switzerland is a member of a cooperative association. At the end of 1939 there were 11,629 registered associations. These included 1,190 consumers' cooperatives, 246 housing associations, 408 sick and death benefit funds, 436 water-supply associations, 297 electricity and gas cooperatives, 685 Raiffeisen credit associations, and 71 workers' productives, in addition to some 5,000 agricultural associations.

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[11] Exchange rate of krona in 1939=23.99 cents.

In 1939 the Swiss Union of Consumers' Societies (V. S. K.) had in affiliation 545 associations with 427,000 members and annual sales of 326,440,000 francs.[12] The Catholic union, "Konkordia," had 44 associations with about 5,000 members.

Surrounded by war operations as Switzerland has been, the country's economy (including that of the cooperatives) has naturally been far from normal. The cooperatives have been able to function successfully, however, and have acted to insure greater efficiency of operation and strict reliance upon the principal of cash trading.

Yugoslavia

The greater part of the cooperative movement in Yugoslavia is among the peasants, who form some 80 percent of the total population. A large part of the cooperation among the farmers has been promoted by the Croatian Peasants' Party; its cooperative program has been along two lines—cultural and economic. In the attempt to combat the very widespread illiteracy, each member of the cultural branch, "Peasant Concord," who can read and write is pledged to teach a certain number of persons each year. The economic branch, "Economic Concord," has carried out a number of projects to improve the peasants' economic status. Among these have been the electrification of a number of villages and the establishment of several schools and a library.

The work of peasant cooperatives in rural health work has been outstanding. The Union of Health Cooperative Societies in 1938–39 had 134 affiliated societies with 65,586 members. The 69 cooperative drug stores had a total business during the year amounting to 2,626,000 dinars.[13] A traveling dental clinic was organized during the year.

Altogether, 10,832 cooperative associations with a combined membership of 1,414,876 [14] were affiliated to the General Federation of Cooperative Unions in 1938. The largest groups were the 4,909 credit associations and the 2,521 consumers' associations.

Reports indicate that in spite of war conditions, up to late in 1940 the cooperatives had not only been able to function but even to expand their educational work.

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[12] Exchange rate of Swiss franc in 1939=22.53 cents.

[13] Exchange rate of dinar in 1939=2.27 cents.

[14] Estimated population of Yugoslavia in 1939 was 15,630,000.

SOURCES: This article is based upon data from International Cooperative Alliance, Consumers' Cooperation under the Nazi Régime (London, July 1940); International Labor Office, Cooperative Information No. 4, 1939, No. 9, 1940, Nos. 1 and 3, 1941; Review of International Cooperation (London), issues of April, September, October, November–December 1940 and February 1941; Annals of Collective Economy (Geneva), January–April 1940; People's Year Books for 1940 and 1941; Canadian Cooperator (Brantford, Ont.), issues of October 1940 and January 1941; Cooperative Consumer (North Kansas City, Mo.), July 16, 1940; Cooperative Builder (Superior, Wis.), issues of November 9, 1940 (article by Antero Rinne, editor for K. K., Helsinki, Finland) and February 8, 1941; and Free America, October 1940.

Housing Conditions

NATIONAL RESOURCES PLANNING BOARD REPORT ON THE HOUSING PROBLEM

IN A report on the housing problem, the National Resources Board has summarized the various housing studies made at the request of the National Resources Committee by several Federal agencies.[1] Certain definite points of agreement and of disagreement appeared in the various reports, but agreement on basic points was marked. All the housing agencies of the Federal Government believed that (1) many more dwelling units are needed, particularly for families of low income; (2) some sort of governmental aid is necessary for housing people in the lower income groups; (3) control of land use and the cost of acquiring and developing sites require new techniques and fresh points of view; (4) zoning or other control of neighborhoods and communities is essential; and (5) methods must be found to enforce certain minimum standards of safety, sanitation, and decency.

Continued careful study of housing design and more flexibility in building codes were advocated. Minor and technical differences of opinion were expressed as to the details of design and its regulation. Differences also arose as to the method of handling legal problems arising out of residential construction. Building materials and labor costs are important not only to the housing group but to the construction industry as a whole. Because of the importance of housing in the construction industry, any report that fails to recognize the significance of housing in the larger economic picture would be incomplete, the Board states.

Findings and Conclusions

Two tasks are recognized in meeting the housing need—to build a sufficient supply of good dwellings, and to set the stage for efficient functioning on the part of the construction industry. The housing problem is composed of a combination of interrelated problems, including land values, building codes, tax rates, material and labor costs, legal questions, adequate financing, zoning and site planning, management, and effective administration of the necessary private

[1] United States. National Resources Planning Board. Housing: The Continuing Problem. Washington, 1940.

and public agencies. The solution cannot be found in any single or simple formula, and joint action by industry, the community, and State and Federal Governments is required.

Failure of the construction industry to supply sufficient housing is often attributed to high labor and tax costs, but this is only part of the problem. A paradox exists in the fact that there have been times when a large volume of dwelling construction took place in spite of high costs, as in the 1920's. But in recent years the lag has been pronounced. The demand for governmental action to stimulate business has focused attention on the demand for more housing and, "to a certain extent, it has also prevented attention being directed to the specialized problems which are characteristic of residential construction." Nevertheless, general business activity and house building are inseparable questions, since residential construction makes up a considerable share of economic life.

Factors of long-time significance facing the industry are population, national income, the demand for services that compete with housing, the organization of the construction industry, and the physical and economic setting established by the building of our cities in their present form.

Building costs have remained high, while the costs of many other commodities have been lowered. It is not enough to state that better buildings are now erected for the same amount of outlay—if this is true. For an owner-built house, 15 to 35 percent of the total cost is for land ready to use, and 65 to 85 percent is for building construction. In practice, the problem for the owner is in meeting monthly charges, and if he has bought his house ready-built, the sums paid for financial charges, interest, and amortization may have little or no relation to the original cost of the dwelling.

A large proportion of the population occupies rented dwellings. Here again, the rent bears little relation to the original cost. The renter may pay more or less than is required to cover the landlord's costs. The renter takes advantage of periods of decline in rents and the landlord takes advantage of rises.

The foregoing examples show that "low-cost housing" does not necessarily mean low capital outlay.

Two other elements—taxes and transportation charges—must be calculated for. Since the average worker must get to and from his job, savings in the cost of his dwelling may be more than made up for by high transportation charges. Land costs are likely to be higher after transportation charges are lowered, and transportation facilities may alter the character of neighborhoods. Costs reflected in taxes are even more significant. Residential real-estate revenue pays for a large share of police and fire protection, streets, schools,

etc. Neither owners, renters, nor landlords should overlook the tax item in owning or occupying dwellings.

Reduced housing costs and improved quality are important, in the long run. To this end, coordination of the building process is desirable. New methods such as prefabrication and the use of new materials and equipment can contribute to improved living accommodations. However, "the combination of old skills and well-known materials will probably continue to supply most of the shelter" for some time to come.

Every tenant, whether an owner or a renter, is buying a share in his community. The way in which the individual uses his land affects the neighborhood. Local tax policies can both hinder and aid any governmental program to encourage house construction. Costs can be lowered by unifying machinery for collection of taxes and special assessments. As the demand for community facilities increases, tax revenues must be raised. This is a problem that must be faced in extending the public housing program for low-income families. The report here reviewed states that the implications of major tax modifications and exemptions are so far reaching that no suggestions are being made at this time. The need for further analysis and study is emphasized.

Simplified procedures relating to the transfer of property are recommended and also legislation of a type that will enable municipalities, housing authorities, and State authorities to work together and with the Federal Government.

The Federal Government has been placed in a position of leadership in the development of public housing for families of low income, owing to the widespread nature and persistence of the problem. Its work has been valuable, but new methods of dealing with the situation are necessary. Relationships must be revised in the light of developments. In the field of private finance, the need for Federal supervision and control has been demonstrated. Where the Government subsidizes, improved conditions should be brought about. The art of administering subsidies is said to consist in moving "toward new goals of public policy as fast as present goals become generally acceptable."

The report here reviewed urges an extension of research activities in the field of housing by Federal agencies and points out that progress can be achieved only by the constant review of public policies toward supplying housing needs. Public initiative is called for when private activity fails to produce the required shelter. There are several lines of approach. We should move for lower costs, while at the same time maintaining certain minimum standards; strive to develop public controls, to protect neighborhoods; and build with public funds under public initiative for those who otherwise cannot have decent housing.

In spite of the existence of such a program, costs will be a problem for years to come, the Board believes. The habits of industries must be changed. Zoning and city planning are still in their infancy. Public building is only begun. Nevertheless, frank acceptance of housing problems and methods of meeting them will hasten their solution.

Health and Industrial Hygiene

HEALTH OF INDUSTRIAL POLICYHOLDERS, 1940

THE mortality rate among the millions of industrial policyholders in the Metropolitan Life Insurance Co., who live in every section of the United States and Canada, did not set a new low record in 1940, but the rate for the year was equal to the lowest figure ever registered for this group—7.60 per 1,000 insured lives recorded for 1939.[1] The crude mortality in the United States in 1940 was slightly higher than that for the previous year, in line with the experience for the general population as shown by provisional figures. However, the death rate shows a moderate decrease when allowance is made for changes in the composition of this group with regard to color, sex, and age. As compared with 1939, the rate for Canadian policyholders showed a decline of 4.1 percent in both the crude and the adjusted rates. The mortality for this group has been decreasing quite steadily and is now as low as among those living in the Pacific Coast areas of the United States.

The year 1940 completes an uninterrupted series of mortality records which began 30 years ago. During this period the death rate among these insured persons has fallen 40 percent. If the same ratio of death had prevailed in 1940 as in 1911, there would have been 113,295 more deaths among the policyholders, 1 year of age and over, than the number that actually occurred.

The average length of life, or expectation of life at birth, has now reached an all-time high of almost 63 years, a gain of 16⅓ years in the past three decades. This gain in life expectation has been much more rapid among the industrial policyholders than in the population as a whole. In 1911, the life expectancy of these policyholders was 6.41 years less than that of the general population, but at present, although final figures are not yet available for the country, the indications are that it is on a par with that of the general population. This improvement has been evident at virtually every period of life among the policyholders; but at certain ages the drop in mortality since 1911 has been little short of remarkable. In the group of children aged 1 to 4 years the present rate is only about one-seventh that of 1911, while even in the age group 65 to 74 years the decline amounts to over 25 percent.

[1] Metropolitan Life Insurance Co. Statistical Bulletin, January 1941: Excellent Health Record for 1940.

Diseases With New Low Rates

Lower mortality rates [2] than in any previous year were recorded in 1940 for 10 diseases or conditions—measles, scarlet fever, whooping cough, diphtheria, pneumonia, tuberculosis, diarrhea and enteritis, appendicitis, diseases of the puerperal state, and homicides. The mortality rate for suicides was the lowest in a decade, and the rate for influenza, although lower than in the preceding year, was slightly higher than in 1938.

Of the greatest importance in public-health developments in 1940 is the sharp decline in the mortality from pneumonia. The rate was 35.5 per 100,000 in 1940, as compared with 42.8 in 1939, 50.6 in 1938, and 66.9 in 1937. Prior to 1937, the mortality had fluctuated for a number of years around a level of 70 per 100,000, so that the decline of the last few years, it is stated, may be regarded as a definite fall from an established level to a new one at about a halfway point. The recent introduction of highly effective serums and drugs, which have revolutionized the clinical treatment of pneumonia, are responsible for the increasing control over the disease. This development promises to be epochal in medical history, it is said, and "illustrates once again what can be done in the conservation of human life when specific weapons are forged for the campaign against individual diseases." The prospects for the further control of pneumonia are so encouraging that it may be expected the disease will be reduced, before long, to a minor cause of death.

Deaths from influenza were 20 percent lower in 1940 than in 1939, in spite of an epidemic which prevailed in large sections of the country near the close of the year. This was due in part to the comparatively mild character of the disease as compared with the disastrous epidemic of 1918 and 1919.

The mortality rate for tuberculosis declined from 45.2 per 100,000 in 1939 to 44.3 in 1940. The success of the campaign against tuberculosis during the past 30 years is shown by the fact that in 1911 the rate was 224.6 per 100,000 and was 80.9 only 10 years ago, as against the present rate of 44.3.

Measles, scarlet fever, whooping cough, and diphtheria—the principal communicable diseases of childhood—declined 31 percent in the year, or from 4.2 per 100,000 in 1939 to 2.9 in 1940. Each of these diseases reached a new minimum in 1940, and all except whooping cough had a mortality rate of less than 1 per 100,000. Only a comparatively few years ago the death toll from this group of diseases was serious, but it has now been reduced to a point where their complete suppression may be expected.

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[2] The 1940 rates are subject to slight correction, since they are based on provisional estimates of lives exposed to risk.

The public-health movement is said to be responsible for the reduction in mortality from diarrhea and enteritis, which in 1930 had a rate of 20.4 per 100,000 and in 1940 had dropped to a rate of 4.6. Advances in sanitary science, including the pasteurization of milk, the better refrigeration of foods, and the purification of water supplies, as well as the general rise in the standard of living, are the main reasons for this improvement.

A new low death rate was established for diseases of pregnancy and childbirth, the 1940 rate of 4.9 per 100,000 being almost 10 percent lower than the rate for the preceding year. It is said that these figures are an understatement of the degree of improvement, since preliminary figures indicate that a larger number of women bore children in 1940 than in the year before. A reduction of 12 percent from the previous year occurred in the mortality from appendicitis, which reached a new low rate of 9.1 per 100,000.

Diseases With Higher Rates

The accident rate of 46.7 per 100,000 was only slightly higher than the 1939 rate, which established a minimum record, and there was no marked change in the leading causes of accidental death. However, in view of the general speeding up of industrial production and the introduction of large numbers of inexperienced workers into defense industries, the danger of a higher death rate for accidents is pointed out.

The chronic diseases of middle and later life were almost entirely responsible for the increases in mortality which occurred among industrial policyholders last year. The crude death rates from diabetes, cancer, and the cardiovascular renal diseases were at higher levels in 1940 than ever before. These increases reflect the increasing proportion of policyholders at the older ages, and it may be expected, therefore, that these causes of death will increase in relative importance in the next few decades.

MEDICAL CARE IN BRITISH FACTORIES

THE objects of medical supervision in factories and the duties of medical men in charge were set forth in a memorandum issued by the Factory Department of the British Ministry of Labor and National Service, in November 1940.[1] Provision for the organization of medical services was made in an order [2] issued by the Ministry on July 16, 1940, which provided that the occupiers of certain factories may be required, by a factory inspector expressly authorized by the Minister, to make

[1] Ministry of Labor Gazette (London), December 1940.
[2] Idem, August 1940.

arrangements for the supervision of the health and welfare of the workers employed. It was specified that the arrangements must provide for the whole-time or part-time employment of such numbers of medical practitioners, nurses, and supervisory officers as the inspector may determine. It is stated that, although the principal purpose of medical supervision is the maintenance of the workers' health at full efficiency, the aim is also, in conjunction with medical services outside the factory, to prevent sickness and alleviate its consequences as well as to minimize the effects of injury caused by accident, thus benefiting both industry and the individual workers.

The memorandum emphasizes the important status of the factory medical officer and suggests that he should have direct personal contact with the management regarding specific or general conditions of employment, or, preferably, that he should be an integral part of the personnel management of the enterprise.

The principal duties of the medical officer are to be responsible for the organization and supervision of first-aid services (but not including home treatment nor continued treatment at the works, except with the consent of the patient's panel practitioner); to give medical examinations and advice to persons referred to him by the labor manager, or to individual employees who consult him; to give physical examinations to persons who are to be employed in processes involving a specific health hazard; and to determine whether or not persons returning to work after illness are able to work. Other duties of the medical officer are to advise the management on matters of general hygiene within the factory; to cooperate with the management and with outside welfare authorities on all matters affecting the health of the workpeople; to create and maintain an effective liaison with outside health services, namely, medical practitioners, hospital services, and local authorities; to maintain adequate records, in confidential form; to promote education of the workpeople in matters of general and personal hygiene; and to assist, in his professional capacity, in the Air Raid Precautions Services of the factory and in the training of A. R. P. personnel.

Medical Examination

A physical examination of new employees under 16 years of age is required in all cases, and there are also certain requirements as to the examination of workers who are to be employed on special processes. The memorandum points out the advisability of physical examination of all persons entering employment—irrespective of age or type of employment—as a means to proper placement, and of periodic examinations to determine the relationship between the physical condition of workers and their jobs. The value of interviewing and, if necessary, examining workers who have been absent on account of

illness is stressed, together with the necessity in such cases of maintaining close collaboration between the medical officer and the worker's private medical attendant. It is regarded as important that the medical officer should be familiar with all the work processes throughout the establishment in order to be able to assess the potential hazards.

HEALTH OF WAR WORKERS IN GREAT BRITAIN

MODERN methods of waging war depend almost as much on the economic resources of a country as on the size and skill of its fighting services. An article [1] pointing out this fact and discussing the economic factors important in the war effort, by H. M. Vernon, formerly investigator for the British Industrial Health Research Board, states that the full development of the economic resources of the country depends upon three main factors. These are, first, a large body of skilled and unskilled workers and second, an adequate supply of machinery and material, but a third factor, the health of the workers, it is stated, is sometimes neglected or forgotten. Since the workers cannot achieve their highest production if they are not physically fit, it is of great importance that their hours of work should not be so excessive as to cause overfatigue and factory conditions such as ventilation, heating, and lighting should be maintained at a high standard. In order to reach even a partial solution of the problem, it is said, the combined wisdom of medical men experienced in industrial work, of industrial psychologists, and of welfare workers, as well as of factory managers, is required.

Information regarding the effects of working conditions was largely lacking during the first part of the last war and, as a result of the extent of sickness and loss of efficiency among the munition workers, a special Health of Munitions Workers Committee was appointed "to consider and advise on questions of industrial fatigue, hours of labor, and other matters affecting the physical health and physical efficiency of workers in munition factories and workshops." The committee carried out its studies between September 1915 and the end of 1917, and its recommendations received a wide measure of acceptance. The work of the committee has been continued and extended in the past 20 years by the work of the Industrial Fatigue (now Health) Research Board, the Industrial Welfare Society, and the National Institute of Industrial Psychology.

It appears that the chief error in the first years of the last war was the imposition of excessive hours of work. Many men were required to work more than 80 hours a week, over long periods; and women, taking into consideration their weaker physique, were treated even more severely, as some of them had to work 77 hours a week. Al-

[1] *In* Britain Today, New York, The British Library of Information, 50 Rockefeller Plaza, December 1940.

though it was well known that in peacetime output did not improve, except for short periods, if the hours exceeded 48 to 54 a week, it was argued that under the incentive of wartime patriotism the workers could work efficiently for far longer hours than in times of peace. In order to settle the controversy on this point, studies were made of the output of suitable groups of munition workers under various working periods. It was found that women reached their highest output in a working week of about 54 hours, and that after that time the effects of overfatigue were shown in their output, especially if no week-end rest was allowed. Men could stand a working week of 60 hours or more on ordinary jobs, but for heavy muscular labor their optimum hours were similar to those of women.

During the first months of the present war, hours of women seldom exceeded 54 a week, although some of the men worked excessive hours. In May 1940, however, the national situation became so serious that Government-controlled factories were ordered to work 12-hour shifts for 7 days a week. This order affected both men and women and, although output improved for a few weeks, it soon fell back to about its previous level, and the adverse effect on the health of the workers became evident. The following month, however, the powers of the Home Secretary under the Factory Acts were transferred to Mr. Bevin, the Minister of Labor and National Service, who at once created a Factory and Welfare Advisory Board to assist him in developing safety, health, and welfare measures in the factories. It was soon decided to restore the provisions of the Factory Acts, which limit the hours of work for women to 48 per week. For very exceptional causes these hours may be extended to 54 for 25 weeks in the year. The hours of work of men have never been fixed by the Factory Acts, but the writer of the article under review states that, as far as could be ascertained, the majority of men now work from 54 to 60 hours a week.

Wartime working conditions differ considerably from those of peacetime. Ventilation and lighting are affected by the "black-out" regulations, and require special attention. A particularly high standard of lighting is necessary in those factories which are kept in a permanent black-out condition by day as well as by night, if mental depression of the workers is to be avoided.

Regulations were issued [2] by the Minister of Labor and National Service on January 14, 1941, fixing the minimum lighting standards at workplaces and for the interior parts of factories in which persons are employed more than 48 hours per week and providing that, where necessary, protection should be afforded the workers against glare and conditions which produce eyestrain. The order provided for exemptions from these regulations in workrooms or processes where

[2] London. Statutory Rules and Orders, 1941, No. 94.

the requirements were considered inappropriate. The regulations became effective February 1, 1941.

Special Health Measures

It has been more and more realized in recent years that health is closely dependent on nutrition. It is necessary that food should be adequate, not only in quantity but in quality as regards the content of protective foods, minerals, and vitamins. Consequently, it is said, all war factories of any size should provide canteens where the workers can get satisfactory hot meals at a reasonable price. Because of the long distances which many workers must travel between home and factory, it is also desirable that they should be able to obtain light meals before starting work, while night-shift workers should be able to obtain hot meals at night.

In addition to the creation of the Factory and Welfare Advisory Board, the Minister of Labor and National Service has taken many other steps to promote the health of the war workers. These measures include the requirement that factories employing more than 250 workers shall provide medical service[3] and the institution of a special course of instruction in industrial hygiene for factory physicians. The need for these services is shown by experience in the last war. Medical examinations of large numbers of woman munition workers in 1916 and 1917 showed that a third of the workers examined evidenced "some fatigue or ill health," while 7 percent showed "marked fatigue or ill health." These figures apply to the women who were actually working, but many of them became so sick that they had to give up war work altogether. In each 3-month period, more than a quarter of the women gave up work, largely because of ill health, and had to be replaced. It was not possible to trace their subsequent history, but the mortality records of the Registrar-General showed an alarming increase in deaths from phthisis. In 1918 the deaths from this disease among young women aged 15 to 24 was half again as great as in the years 1911 to 1914, but the rate for women aged 35 and over was very little affected. It was considered that, since these older women were for the most part married and with families and so were seldom employed in munition factories, the excess of deaths among young women was due largely to the war work under war conditions. The rise in phthisis cases was particularly marked in the large industrial cities where there was a marked influx of war workers. The health of men in the last war was not so greatly affected as was that of woman workers, partly because of their better physique and partly because, when required to work very long hours, they either consciously or unconsciously slowed up their work in order to conserve their energies,

[3] See p. 922 of this issue.

while on the other hand the less-experienced women seldom spared themselves.

Factory Canteens

An order relating to factory canteens was issued on November 11, 1940, by the Minister of Labor and National Service, in accordance with the powers conferred by the Defense (General) Regulations, 1939.[4] The order provides that the occupier of any factory in which more than 250 persons are employed and in which is carried on the manufacture or repair of any munitions of war or of any materials, parts, or tools required for such manufacture or repair, or any work on behalf of the Crown, may be required to provide a canteen where hot meals can be purchased by the workers. The factory-inspection service, acting on behalf of the Minister, has authority to order the establishment of such canteens.

[4] Ministry of Labor Gazette (London), December 1940.

COURT DECISIONS OF INTEREST TO LABOR

Court Holds Labor Board Orders Must Relate to Specific Issues

THE United States Supreme Court, in a 5 to 3 decision, has held that the orders of the National Labor Relations Board must be confined to unfair labor practices actually found to have been carried on by an employer.[1]

The Board, in this case, ruled that the Express Publishing Co. of San Antonio, Tex., had violated the National Labor Relations Act by refusing to bargain collectively with the San Antonio Newspaper Guild. In addition to ordering the employer to cease interfering with the efforts of the union to bargain, the Board broadly ordered the employer to refrain from violating the act in any manner whatsoever. This latter, a so-called "blanket order," was held by the majority court to be improper. Mr. Justice Stone, who delivered the opinion, declared that the Board should have directed its order simply against the specific violations of which the employer had been found guilty and not against other unlawful practices which are unrelated.

The effect of the ruling is that the Board may not issue a blanket order requiring an employer to desist from committing any act in violation of the statute, but must be reasonably specific in stating the acts which the employer is to do or refrain from doing. The National Labor Relations Act, the Court stated, did not contemplate that an employer who had unlawfully refused to bargain with his employees shall, for the indefinite future, conduct his labor relations at the peril of a summons for contempt on the Board's allegation, for example, that the employer had discriminated against a labor union in discharging an employee, or because his supervisory employees had advised other employees not to join a union.

In a dissenting opinion Mr. Justice Douglas, joined by Mr. Justices Black and Reed, contended that the order of the Board should have been enforced in full. Mr. Justice Douglas further said that Congress had invested the Board with discretion to choose and select the remedies necessary or appropriate for the evils at hand. It is not for the Court to say what language is adequate to safeguard the rights of labor which are in issue. The minority group thought that to cut

[1] *National Labor Relations Board* v. *Express Publishing Co.* (61 Sup. Ct. 693).

down the language of the order not only substituted the judgment of the Court for that of the Board, but would also result "in the creation of a host of uncertainties."

State Labor Relations Act Applicable in Absence of Federal Jurisdiction

The Wisconsin Employment Peace Act was held by the State Supreme Court to apply to an employer engaged in interstate commerce, where jurisdiction had not been assumed by the National Labor Relations Board.[2] The court ruled also, as against the contention of the union involved, that the Wisconsin Act as applied to such an employer was not unconstitutional on the theory that the Federal and State acts so differed in their terms and definitions as to result in a fatal conflict.

In this case the State Employment Relations Board had held a union to be guilty of unfair labor practices under the State act, because it had engaged in a number of practices such as mass picketing, the threatening of employees, obstructing and interfering with employees entering the factory, and the picketing of employees' homes. Fourteen individual employees were found guilty also of unfair labor practices by reason of threats, assaults, and other misdemeanors. The order of the Board, among other things, required the union to stop mass picketing and desist from obstructing factory entrances.

In holding that the State act was applicable in this case, the court declared that there can be no conflict between the Federal and State acts until they are applied to the same labor dispute, because the acts operate in two different spheres. The National Labor Relations Act deals with labor relations only as a means of protecting interstate commerce, while the Wisconsin act deals with the subject as an exercise of the police power of the State. However, to the extent that orders of the National Labor Relations Board apply in a particular controversy, the jurisdiction of the Wisconsin board would be superseded. In the case under consideration, the court pointed out that the employer had never been charged with an unfair labor practice and that the National Labor Relations Board had never been requested to determine the proper bargaining representative. Consequently, the National Labor Relations Act had never actually been called into play in the case of this labor dispute.

State Labor Relations Act Not Applicable to Hospitals

The Pennsylvania Labor Relations Act was held not to apply to charitable hospitals which were partially supported by a State appro-

[2] *Allen-Bradley Local No. 1111* v. *Wisconsin Employment Relations Board* (295 N. W. 791).

priation, according to a recent decision of the supreme court of that State.[3] The court also ruled that the State anti-injunction act does not apply in such cases, since a "labor dispute" would not be involved. The decision upheld a ruling of a lower court restraining the Pennsylvania Labor Relations Board from conducting an employee election, and also restraining a union from asserting any rights in organizing hospital employees. In effect, this decision prohibits all union activity in hospitals, including demands for wage increases, etc.

The court based its decision on the ground that hospitals are not considered "employers" within the meaning of the Labor Relations Act. The term "employer," as defined by the act, excludes the Commonwealth or any of its subdivisions. While hospitals are not subdivisions of a State, the court pointed out that they are agencies selected by the State as a means of assisting in some degree indigent and disabled persons and are therefore impressed with a public interest which removes them from the act.

The State Supreme Court approved also the holding of the lower court that the controversy between the hospitals and their employees did not involve a labor dispute within the Pennsylvania Anti-Injunction Act. The court based its opinion on the ground that hospitals were not classed as an "industry" and their employees were not considered as engaged in a single trade, craft, or occupation. Therefore, a preliminary injunction could be granted to restrain any proceedings or assertions of rights against the hospitals with respect to a controversy with the employees, before a hearing was held.

Pennsylvania Labor Relations Act of 1937 Held Constitutional

The Pennsylvania Supreme Court has held constitutional[4] the State Labor Relations Act as enacted in 1937.[5] The employer in this case had contended that the act was unconstitutional as an unreasonable interference with rights of property and freedom of contract. It was urged also, on the part of the employer, that he would be deprived of the right of trial by jury, and further that the act was invalid because it was special legislation regulating labor. In addition to holding that the act was a proper exercise of the police power of the State, the court ruled that the right of trial by jury had not been violated and further that the act was general rather than special legislation, and therefore valid.

The court, however, modified the scope of the Board's order in this case. It argued that if the discharged employee had been offered suitable employment but declined it or became disqualified from per-

[3] *Western Pennsylvania Hospital* v. *Lichliter* (17 Atl. (2d) 206).

[4] *In re W. T. Grant Co., Inc.* (17 Atl. (2d) 614).

[5] The State Labor Relations Act of Pennsylvania was materially modified in 1939, chiefly by proscribing certain "unfair labor practices" of labor organizations and employees. This decision does not relate to such sections in the 1939 law.

forming the work, these facts should be considered in determining the sum necessary to reimburse the employee. The court quoted from a United States Supreme Court case (*Republic Steel Corporation* v. *National Labor Relations Board*, 61 Sup. Ct. 77), and noted that the opinion in that case concerning the National Labor Relations Act was applicable to the Pennsylvania act. In that case, the Supreme Court determined that "the act is essentially remedial. It does not carry a penal program declaring the described unfair labor practices to be crimes. The act does not prescribe penalties or fines in vindication of public rights or provide indemnity against community losses as distinguished from the protection and compensation of employees."

Population Problems

DECLINE IN FAMILY SIZE FROM 1930 TO 1940

IN THE United States the average number of persons in the family is becoming smaller. The average population per occupied dwelling unit in 1940 was 3.8, whereas the 1930 average population per private family was 4.1, according to preliminary figures from the Sixteenth Census.[1] The average numbers of members per family in 1920, 1910, 1900, and 1890 were, respectively, 4.3, 4.5, 4.7, and 4.9. The shrinkage in family size from 1890 is attributed by the United States Bureau of the Census to increased urbanization and the decline of the birth rate.

In 1940, in the Pacific division, the average population per occupied dwelling unit was only 3.2. The South Atlantic division had the highest average—4.2. In only 2 of the 9 geographic divisions was the average as high as 4 or more persons in 1940, whereas in 1930 all but one division were found to have averages of 4 or more persons per private family. By States, in 1940 the average number of persons per occupied dwelling unit ranged from 3.2 in Washington, Oregon, and California, respectively, to 4.5 in North Carolina. None of the States outside the Far West averaged less than 3.5.

In every State the number of families was greater in 1940 than in 1930. In this connection it should be noted that in 6 States the population declined. It is obvious, therefore, that the number of families may increase without an expansion of the population.

The decrease in the size of families in the United States, even though it has been persistent and fairly rapid, has for some reason not received as much attention in the interpretation of population changes as it deserves. For many users of population statistics, the number of families is more directly significant than the total population, since each new family is, for example, a potential purchaser or renter of a home or dwelling unit. Under favorable economic conditions a large proportion of this potential demand will result in the purchase or rental of additional homes—perhaps representing, in some cases, the undoubling into separate dwelling units of two or more families previously living in one unit. It is evident that the increase in the number of families is of paramount importance as an indication of prospective demand, not only to the construction and building-material industries and to banks and other institutions interested in home financing, but also to many other lines of business concerned with supplying household needs.

[1] United States Bureau of the Census. Press release series PH–3, No. 1, Washington, December 20, 1940.

Average Population per Occupied Dwelling Unit in 1940 and Average Population per Private Family in 1930

[Preliminary figures for occupied dwelling units; final figures for population]

Division and State	1940			1930		
	Population	Occupied dwelling units	Average population per occupied dwelling unit	Population	Private families	Average population per private family
United States	131,669,275	34,772,673	3.8	122,775,046	29,904,663	4.1
New England division	8,437,290	2,187,358	3.9	8,166,341	1,981,499	4.1
Middle Atlantic division	27,539,487	7,276,393	3.8	26,260,750	6,374,380	4.1
East North Central division	26,626,342	7,250,350	3.7	25,297,185	6,362,823	4.0
West North Central division	13,516,990	3,681,714	3.7	13,296,915	3,317,881	4.0
South Atlantic division	17,823,151	4,268,471	4.2	15,793,589	3,511,860	4.5
East South Central division	10,778,225	2,622,215	4.1	9,887,214	2,273,359	4.3
West South Central division	13,064,525	3,369,360	3.9	12,176,830	2,868,262	4.2
Mountain division	4,150,003	1,115,634	3.7	3,701,789	914,408	4.0
Pacific division	9,733,262	3,001,178	3.2	8,194,433	2,300,191	3.6
New England division:						
Maine	847,226	209,664	4.0	797,423	197,826	4.0
New Hampshire	491,524	132,849	3.7	465,293	119,337	3.9
Vermont	359,231	92,414	3.9	359,611	89,188	4.0
Massachusetts	4,316,721	1,118,104	3.9	4,249,614	1,021,160	4.2
Rhode Island	713,346	187,610	3.8	687,497	165,343	4.2
Connecticut	1,709,242	446,717	3.8	1,606,903	388,645	4.1
Middle Atlantic division:						
New York	13,479,142	3,663,373	3.7	12,588,066	3,153,124	4.0
New Jersey	4,160,165	1,098,284	3.8	4,041,334	985,636	4.1
Pennsylvania	9,900,180	2,514,736	3.9	9,631,350	2,235,620	4.3
East North Central division:						
Ohio	6,907,612	1,894,897	3.6	6,646,697	1,697,918	3.9
Indiana	3,427,796	959,563	3.6	3,238,503	843,066	3.8
Illinois	7,897,241	2,189,223	3.6	7,630,654	1,929,396	4.0
Michigan	5,256,106	1,382,738	3.8	4,842,325	1,180,554	4.1
Wisconsin	3,137,587	823,929	3.8	2,939,006	711,889	4.1
West North Central division:						
Minnesota	2,792,300	726,391	3.8	2,563,953	606,496	4.2
Iowa	2,538,268	700,173	3.6	2,470,939	635,704	3.9
Missouri	3,784,664	1,065,653	3.6	3,629,367	939,476	3.9
North Dakota	641,935	152,039	4.2	680,845	145,005	4.7
South Dakota	642,961	165,113	3.9	692,849	161,013	4.3
Nebraska	1,315,834	360,255	3.7	1,377,963	342,999	4.0
Kansas	1,801,028	512,090	3.5	1,880,999	487,188	3.9
South Atlantic division:						
Delaware	266,505	70,549	3.8	238,380	59,092	4.0
Maryland	1,821,244	462,591	3.9	1,631,526	385,179	4.2
District of Columbia	663,091	171,023	3.9	486,869	125,554	3.9
Virginia	2,677,773	627,550	4.3	2,421,851	529,089	4.6
West Virginia	1,901,974	445,686	4.3	1,729,205	373,941	4.6
North Carolina	3,571,623	786,446	4.5	3,170,276	644,033	4.9
South Carolina	1,899,804	434,557	4.4	1,738,765	365,680	4.8
Georgia	3,123,723	750,633	4.2	2,908,506	652,793	4.5
Florida	1,897,414	519,436	3.7	1,468,211	376,499	3.9
East South Central division:						
Kentucky	2,845,627	700,892	4.1	2,614,589	609,405	4.3
Tennessee	2,915,841	713,853	4.1	2,616,556	600,625	4.4
Alabama	2,832,961	670,111	4.2	2,646,248	591,625	4.5
Mississippi	2,183,796	537,359	4.1	2,009,821	471,704	4.3
West South Central division:						
Arkansas	1,949,387	494,716	3.9	1,854,482	438,639	4.2
Louisiana	2,363,880	590,722	4.0	2,101,593	485,363	4.3
Oklahoma	2,336,434	609,094	3.8	2,396,040	564,164	4.2
Texas	6,414,824	1,674,828	3.8	5,824,715	1,380,096	4.2
Mountain division:						
Montana	559,456	159,398	3.5	537,606	136,210	3.9
Idaho	524,873	140,742	3.7	445,032	108,044	4.1
Wyoming	250,742	69,227	3.6	225,565	56,887	4.0
Colorado	1,123,296	314,952	3.6	1,035,791	267,324	3.9
New Mexico	531,818	128,389	4.1	423,317	98,546	4.3
Arizona	499,261	130,020	3.8	435,573	105,992	4.1
Utah	550,310	139,580	3.9	507,847	115,936	4.4
Nevada	110,247	33,326	3.3	91,058	25,469	3.6
Pacific division:						
Washington	1,736,191	534,237	3.2	1,563,396	423,833	3.7
Oregon	1,089,684	335,944	3.2	953,786	266,328	3.6
California	6,907,387	2,130,997	3.2	5,677,251	1,610,030	3.5

In the foregoing table the average number of persons per family has been arrived at by dividing the population by the number of occupied dwelling units in 1940. Although the number of occupied dwelling units does not correspond exactly with the number of private families, the Census statisticians hold that the difference is so slight that it need not be considered in relation to the present purposes of these figures.

Cost and Standards of Living

CHANGES IN COST OF LIVING FROM JANUARY TO FEBRUARY 1941

LIVING costs were affected by a variety of price movements between mid-January and mid-February, and the Bureau of Labor Statistics cost-of-living index rose by one-tenth of 1 percent to 100.8 percent of average costs in 1935–39, 2.2 percent above the August 1939 level.

The cost of pork, fresh vegetables, and certain food staples rose during the month and men's clothing, sheets, blankets, and some other housefurnishings were also higher. In the budgets of average large-city families, however, these increases were offset by lower prices for other foods such as eggs, beef, and fish; declines in coal and fuel oil prices from their seasonal peak in December and January; and February-sale prices of women's coats. Rents advanced in a few of the cities where industrial activity has increased in connection with the defense program, although there was not much change for the whole country because few tenants move in mid-winter.

The family food budget cost a little more in February than in January, about 2 percent more than in November 1940, and 4.7 percent more than in August 1939 (just before the outbreak of war, when food prices were generally quite low). Prices of coffee, sugar, and lard were moderately higher and those of some fresh vegetables rose because of rainy weather in winter vegetable-producing areas. Pork prices again went up sharply. After declining last fall, they have been rising steadily since December. The recent increase brings the average pork price in large cities to a point 1.3 percent above the August 1939 level. These advances in the food bill were largely offset by the very large seasonal decline in egg prices, which fell from an average of 34.9 cents on January 14 to 30 cents on February 18. Beef and fish prices also declined substantially.

In the last 2 weeks of February, preliminary reports from 18 cities indicate declines in prices of beef, still lower quotations for eggs and butter, and scattered reductions in flour and milk. Higher prices are again reported for the staples—coffee and sugar—and for chickens and oranges.

The prices of men's overalls and work shirts, affected by large Army orders and the needs of newly employed industrial workers,

continued during January and early February the rise which began last fall. Advances were general in the price of men's hats and women's shoes. In a number of cities, prices of men's wool suits were higher in February than during the January sales, but women's coats were still reported at sale prices in February. In the calculation of total clothing costs to wage earners and lower-salaried workers, sale prices for women's coats more than counterbalanced increases in prices for these other articles of clothing.

Rent increases occurred in 9 of the 20 cities for which monthly data are obtained. The largest advances were for dwellings renting for less than $30 a month. In Seattle where defense activity, particularly in the shipbuilding and aircraft industries, has been increasing rapidly, and where employment has risen approximately 30 percent over the last year, an advance of 1.3 percent occurred in average rents. In most of the cities the average increases were slight, as there are usually few rent changes at this time of year.

Average fuel costs declined slightly, as usual at this season of the year. Fuel oil showed a substantial drop in 7 of the 10 cities where oil is commonly used.

TABLE 1.—*Percent of Change From January 15 to February 15, 1941, in Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers*

City	All items	Food	Clothing	Rent	Fuel, electricity and ice	House furnishings	Miscellaneous
Average, large cities	+0.1	[1] +0.1	−0.3	+0.1	[2] −0.2	+0.3	[3]
New England: Boston	+.3	+1.1	[3]	[3]	−.6	+.3	[3]
Middle Atlantic:							
Buffalo	[3]	[3]	[3]	[3]	[3]	−.1	+0.1
New York	+.3	+.9	−1.1	[3]	−.1	+.2	+.1
Philadelphia	−.1	−.1	−.4	[3]	[3]	+.2	[3]
Pittsburgh	−.3	−.5	−1.5	[3]	[3]	+1.0	−.1
East North Central:							
Chicago	[3]	−.3	+.4	+.2	[3]	−.1	[3]
Cincinnati	+.1	[3]	+.1	[3]	[3]	+.7	−.1
Cleveland	+.1	[3]	−.2	+.3	[3]	+1.2	+.1
Detroit	+.1	+.2	+.1	+.2	+.4	[4]	[3]
West North Central:							
Kansas City	+.3	+1.3	−.4	+.1	[3]	+.2	+.1
Minneapolis	+.4	+1.5	−.3	[3]	[3]	−.6	+.1
St. Louis	[3]	+.1	+.2	[3]	[3]	+.9	−.4
South Atlantic:							
Baltimore	+.2	+.4	+.3	[3]	[3]	+.3	[3]
Savannah	−.5	−.4	−2.0	[3]	[3]	−.5	−.3
East South Central: Birmingham	−.1	−.4	[3]	+.3	[3]	+.2	[3]
West South Central: Houston	[3]	−.5	+2.0	[3]	[3]	−.1	−.2
Mountain: Denver	−.2	−.4	[3]	+.1	[3]	+.6	−.3
Pacific:							
Los Angeles	−1.0	−2.8	−.6	+.4	−1.4	+.6	−.1
San Francisco	[3]	[3]	[3]	+.2	[3]	+.3	+.1
Seattle	+.3	+.1	+.1	+1.3	[3]	+.3	+.1

[1] Includes 51 cities.
[2] Includes 33 cities.
[3] No change.

Prices for housefurnishings purchased by wage earners and lower-salaried workers went up between mid-January and mid-February. With the end of the January sales, prices of sheets rose, in most cases to a point above December levels. Furniture and blanket prices

continued the advances of earlier months. After declining last year, prices of electric refrigerators went up, between mid-January and mid-February, in some cities and down in others, but recent reports from trade sources indicate that there was a rather general rise in refrigerator prices in the latter half of February.

Estimated percentage changes for the period, January 15 to February 15, 1941, in the cost of goods purchased by wage earners and lower-salaried workers in 20 large cities of the United States, and for the large cities combined are presented by groups of items in table 1. Table 2 presents estimated indexes of these costs, as of February 15, 1941, based on average costs in the years 1935–39 as 100.

TABLE 2.—*Indexes of Cost of Goods Purchased by Wage Earners and Lower-Salaried Workers, February 15, 1941, by Groups of Items*

[Average 1935–39=100]

City	All items	Food	Clothing	Rent	Fuel, electricity and ice	House furnishings	Miscellaneous
Average, large cities	100.8	[1] 97.9	[2] 99.9	[2] 105.1	[3] 100.9	[2] 100.1	[2] 101.9
New England: Boston	99.2	96.2	98.0	100.5	106.7	96.9	100.9
Middle Atlantic:							
Buffalo	102.0	100.2	99.2	107.1	99.8	99.8	103.0
New York	101.3	100.4	99.3	102.7	100.7	95.9	103.0
Philadelphia	99.2	94.9	100.0	103.6	99.7	101.7	101.8
Pittsburgh	100.8	97.5	100.3	105.7	103.8	102.5	100.8
East North Central:							
Chicago	101.2	97.9	98.4	109.1	100.5	101.9	101.0
Cincinnati	99.6	96.5	101.0	102.3	99.4	100.6	101.0
Cleveland	102.1	99.2	101.4	108.4	108.9	101.4	100.6
Detroit	101.1	97.2	100.1	108.7	98.3	99.2	101.8
West North Central:							
Kansas City	98.5	93.6	100.2	103.0	100.7	99.0	100.0
Minneapolis	101.8	100.5	98.8	108.0	96.8	100.6	102.2
St. Louis	100.8	99.3	100.6	101.6	103.1	96.4	102.2
South Atlantic:							
Baltimore	101.1	98.3	101.5	105.7	100.8	102.5	101.4
Savannah	100.8	100.1	97.5	105.0	96.9	104.2	101.1
East South Central: Birmingham	100.9	95.1	98.9	117.7	94.0	99.3	101.2
West South Central: Houston	101.9	102.1	100.0	107.6	93.2	104.6	100.4
Mountain: Denver	99.4	94.4	98.6	106.8	97.4	101.9	101.3
Pacific:							
Los Angeles	101.8	.99.0	102.8	106.9	94.2	100.8	102.8
San Francisco	102.1	99.6	103.0	104.1	91.5	100.6	105.0
Seattle	102.4	101.1	102.5	108.4	94.9	97.8	103.2

[1] Based on average of 51 cities.
[2] Based on average of 20 cities.
[3] Based on average of 33 cities.

EXPENDITURES OF BRITISH INDUSTRIAL WORKERS, 1937–38

WEEKLY expenditures in 8,905 industrial workers' households in Great Britain and Northern Ireland averaged 86s. 3d.[1] in 1937–38, according to an inquiry undertaken by the British Ministry of Labor, the results of which are here summarized.[2] Among the items entering into the family budget, food accounted for 34s. 1d. weekly (39.5 per-

[1] Under normal conditions the rate of exchange is 4s. to the United States dollar.
[2] Great Britain, Ministry of Labor Gazette, December 1940.

cent of total expenditures); rent or house purchase, ground rent, and taxes, 10s. 10d. (12.6 percent); clothing, 9s. 4d. (10.8 percent); fuel and light, 6s. 5d. (7.4 percent); and "other items," the remaining 25s. 7d. per week (29.7 percent). Important in the "other items" group are national and other insurance, 4s. 5¼d. (5.1 percent of total expenditures); tobacco and cigarettes, 2s. 6½d. (2.9 percent); and transportation, 2s. 3d. (2.6 percent).

This investigation was made to provide information for a revision of the cost-of-living index issued monthly by the British Government and also to show the kinds and amount of food bought by working-class households.

In planning for the new study the Minister of Labor sought to obtain a base for the compilation of monthly indexes of cost of living that would represent buying habits of the present rather than those of 1914, the base year for the existing index numbers. This is regarded in Great Britain as of great importance, as the cost-of-living index is the determining factor in the level of wage rates in many industries. The original proposal for such a study was made by the Minister of Labor in April 1936. A special committee was later established to prepare the necessary plans and careful consideration was given to the scope and methods of the survey.

Scope and Methods

As the object was to collect information on budgets from at least 10,000 households, a selection of over 30,000 representative households was originally made. Adult wage earners and small-salaried households were included from all districts of Great Britain. The Northern Ireland Ministry of Labor collected budgets in Northern Ireland. The majority, but not all of the households, were those of persons insured against unemployment with wages or salaries not exceeding £250 a year. Agricultural workers, as well as industrial, commercial, and clerical workers, were included in the sample.[3]

Personal visits were made to the households selected for inclusion. These visits were organized by the Ministry of Labor Employment Exchanges in the various districts. Informal local advisory committees and groups of voluntary helpers assisted. Households to be included were visited during the first half of October 1937. The inquiry was explained at that time and households were asked to make their first reports on expenditures during the week beginning October 17. They were again visited in the course of the week covered by the study and given any assistance they required in filling out the forms.

[3] A summary of the report on cost of living of agricultural households will be published in a later issue of the Monthly Labor Review.

In addition to the budgets obtained for the initial week in October 1937, data were collected at quarterly intervals—in January, April, and July 1938. By this means it was possible to secure expenditures on many articles the purchase of which varies at different periods of the year.

Households having lodgers were excluded, and persons who had been listed for coverage were also omitted if they were found to be lodgers. Single adults who were living alone were included, when making their own arrangements for food, as it was desired to have returns for a representative group in the population. Persons were paid for each completed budget supplied, with a bonus to those furnishing budgets in all 4 weeks.

Summary of Findings

Industrial households supplying data for all 4 weeks averaged 3¾ persons, of whom nearly 2½ were 18 years of age or over and one was a child under 14. The average number of wage or salary earners was 1¾ per household. The average workweek was 5 days.

Eighty percent of the households were renting dwellings, the average rental amounting to 10s. 8d. weekly. The number of rooms rented, exclusive of those sublet, averaged 3.9. Nearly 18 percent of the households either owned or were buying their dwellings, at a cost of 12s. 9d. weekly on the average for installments, purchase price, taxes, etc. The remaining 2 percent were supplied with shelter rent free. A large proportion of these were coal miners.

Expenditures for food varied little with the change of seasons. For the 4 weeks the average amounted to 34s. 1d.; it was 33s. 9d. in the lowest (April) and 34s. 6½d. for the highest week (July). Expenditures for different items of food varied only slightly on the average. However, the effect of seasonal variations in supplies or consumption is reflected in the expenditure for some articles, including mutton and lamb, pork, fruit, and vegetables. Expenditures for eggs varied little, but there were considerable changes in the quantity bought.

The average quantity of certain important foods bought weekly per household is shown in the following statement.

		Quantity			*Quantity*
Bread	pounds	13. 5	Sugar	pounds	4. 8
Flour	do	4. 4	Apples	do	1. 2
Meats	do	4. 7	Jam and marmalade	do	1. 0
Bacon, ham	do	1. 4	Potatoes	do	13. 8
Butter	do	1. 8	Milk, fresh, whole	pints	11. 2
Margarine	do	. 7	Eggs	number	14. 1
Lard	do	. 5	Oranges	do	3. 8
Cheese	do	. 7	Bananas	do	2. 9
Tea	do	. 7			

Few families grew any of their food. The home produce, if apportioned to all the households included in the inquiry, would have yielded about 1¼ pounds of potatoes and ¼ pound of cabbage weekly, with smaller quantities of other vegetables and about 1 egg every 2 weeks. Some employees received free food from employers, but the amount would be insignificant if distributed over all the households covered.

In the 4 weeks for which reports were obtained the average weekly expenditure for clothing was 9s. 4d. Owing to the wide variations in clothing expenditures at different seasons, a supplementary study was carried out as to clothing expenditures of a representative group over 12 months. It showed a somewhat lower average weekly expenditure—8s. 2d.—distributed as follows: 28 percent weekly for men's clothing; 32 percent for women's clothing; 12 percent for children's clothing; 2 percent for repairs, dyeing, and cleaning; and 26 percent for boots and shoes and shoe repairs.

Nearly one-half of the 6s. 5d. weekly expenditure for fuel and light was used for coal.

Expenditures for miscellaneous items averaged 25s. 7d., or nearly 30 percent of the total weekly outlay. The largest items in this group were household equipment (2s. 11½d.), tobacco and cigarettes (2s. 6½d.), traveling (2s. 3d.), and insurance (national 2s. 0¾d. and other 2s. 4½d.). Trade-union subscriptions amounted to 1s. 4½d. weekly.

A summary of the reports supplied by households of industrial workers is given in the following table.

Summary of Budgets Supplied by Households of Industrial, etc., Workers in 1937–38

[Households of agricultural workers excluded]

Item	General average—households supplying budgets for 4 weeks [1]
Composition, etc., of households:	
Number of households supplying budgets	8,905
Average number of persons per household	3.77
Children, under 14 years	.99
Males, 14 and under 18 years	.15
Females, 14 and under 18 years	.16
Males, 18 years and over	1.22
Females, 18 years and over	1.25
Average number of wage or salary earners per household	1.75
Average number of days worked, in previous week,[2] by—	
Head of household	5.0
All wage or salary earners in household	5.0
Housing:	
Percent, of total households, renting their dwellings	80.0
Average weekly payments, for rent, taxes, and water charges (after deducting any rent received for rooms sublet)	10s. 8d.
Average number of rooms [3] rented per household (excluding any rooms sublet)	3.9
Percent, of total households, owning or buying their dwellings	17.8
Average weekly payments for purchase installments, etc., ground rent, taxes, and water charges (after deducting any rent received for rooms sublet)	12s. 9d.

[1] In cases in which, owing to holidays or other special circumstances, it was found impracticable to obtain satisfactory budgets for the week specified, the nearest week of a normal character was substituted.

[2] In the April budgets, the particulars related to the week ended April 30, as the previous week included Easter Monday. It should also be remembered that households the head of which had been unemployed for a long period were excluded from the scope of the inquiry.

[3] Kitchens are included in the number of rooms shown, but sculleries, bathrooms, etc., are excluded.

Summary of Budgets Supplied by Households of Industrial, etc., Workers in 1937–38—Continued

Item	General average—households supplying budgets for 4 weeks
Housing—Continued.	
Percent of total households provided by employers with dwellings rent-free	2.2
Average weekly expenditure per household on rent or purchase of dwelling, ground rent, taxes, and water charges	10s. 10d.
Food—Total weekly expenditure	34 1
Bread	2 8¼
Flour	0 10
Cakes, buns, pastries, currant bread, etc	1 2¼
Biscuits	0 4
Oatmeal, oatcakes, oats, and proprietary cereals	0 2½
Rice, sago, tapioca, semolina, barley, macaroni, and vermicelli	0 1¼
Beef and veal (joints, cuts, and mince)	2 8
Mutton and lamb (joints, cuts, and mince)	1 5½
Pork	0 6¾
Canned and potted meat	0 2½
Sausages and meat pies	0 7½
Other meat (kidney, liver, fry, heart, head, sweetbreads, tripe, brawn, cow-heels, etc.)	0 5½
Rabbits, poultry, game, etc	0 2½
Bacon, ham (cooked or uncooked) and gammon	1 11
Fish, fresh (including shell fish)	0 7¼
Fish, dried or cured	0 2
Fish, canned, and paste	0 3¼
Fish, fried, and chips	0 4¼
Milk, fresh, whole (including milk at school)	3 0¾
Milk, skimmed (liquid) and buttermilk	0 0¼
Milk, condensed	0 3¼
Milk, dried, and milk preparations	0 1½
Cream	0 1
Butter	2 5½
Margarine	0 4¾
Lard, including compound lard	0 3¾
Suet, dripping, and other cooking fats	0 2¾
Cheese	0 8¼
Eggs	1 10½
Tea	1 7¾
Cocoa and cocoa essence	0 1½
Coffee and coffee essence	0 1
Sugar	1 0½
Jam, marmalade, etc	0 6¼
Syrup, treacle, and honey	0 1
Potatoes	1 1¾
Green vegetables and legumes (fresh) [4]	0 7¼
Dried legumes	0 1
Root vegetables, etc.[5]	0 5¼
Onions, leeks, and shallots	0 1½
Canned and bottled vegetables	0 1½
Apples	0 4¼
Oranges	0 4¼
Bananas	0 2¾
Other fresh fruit, and nuts	0 3¼
Dried fruits	0 4
Canned and bottled fruits	0 3
Meals, etc., away from home [6]	1 1¾
Other food (excluding food for animals, poultry, birds, etc.)	0 9½
Clothing—Total weekly expenditure	9 4
Men's clothing and materials	2 10
Women's clothing and materials	2 5½
Children's clothing and materials	0 11
Clothing repairs, dyeing, and cleaning	0 2½
Boots and shoes	1 10¾
Repairs to boots and shoes	1 0¼
Fuel and light—Total weekly expenditure	6 5
Coal	3 2
Coke	0 1
Gas (including payment for meter rent and fittings)[7]	0 5½
Electricity (including payment for meter rent and fittings)[7]	0 11¾
Oil, firewood, candles and matches	0 8¾

[4] Including cabbage, cauliflower, broccoli, sprouts, greens, spinach, kale, parsley, lettuce, celery, cress, and fresh beans and peas.

[5] Including carrots, swedes, turnips, artichokes, beetroot, radishes, cucumber, marrows, and tomatoes.

[6] Including meals, etc., in restaurants, and meals or food (other than milk) bought at school. Milk bought at school is included in, "Milk, fresh, whole (including milk at school)."

[7] Where a slot meter was used, the budgets showed the expenditure on gas and electricity during the budget week. In other cases they showed the expenditure during the period covered by the last account, and the average weekly expenditure during that period has been taken for the purpose of the figures given in this table.

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Summary of Budgets Supplied by Households of Industrial, etc., Workers in 1937–38 —Continued

Item	General average—households supplying budgets for 4 weeks
	s. d.
"Other items"—Total weekly expenditure	25 7
Soap (including soap flakes)	0 9¼
Soda, polishes, and cleaning materials	0 4¼
Ironmongery, hollow-ware, cutlery, tools, etc	0 2¼
Household brushes and brooms	0 1
Pottery and glass ware	0 1½
Drapery and haberdashery	0 6¾
Furniture	1 1¼
Carpets, linoleum, mats, etc	0 7
Other household utensils and equipment	0 3¾
Tobacco and cigarettes	2 6½
Travel—Total	2 3
Railway fares, to and from work	0 7½
Bus, tram, and coach fares, to and from work	0 11
Other rail, bus, tram, and coach fares	0 8½
Newspapers, magazines, and other periodicals	1 0
Books, stationery, pens, pencils, etc	0 2½
Postage, telephones, and telegrams	0 5
Entertainments:	
Cinemas	0 10¾
Theaters, music halls, concerts, dances, etc	0 3
Sports, games, etc.—admission charges	0 2¾
Education, music lessons, etc	0 3¾
Hairdressing, shaving, etc	0 6¼
Laundry charges	0 6½
Doctor, dentist, optician, midwife, nursing fees, etc	0 10¾
Medicines, drugs, medical and surgical appliances, etc	0 6
Payments to hospital funds	0 3¼
National health, pensions, and unemployment insurance contributions	2 0¾
Insurance premiums, payments to pension funds, etc	2 4½
Trade-union subscriptions	1 4¼
Licenses (dog, wireless, motorcycle, etc.)	0 6
Wages paid for domestic help	0 2¾
Holiday expenditure	0 7¾
Food for animals, poultry, birds, etc	0 1¾
Drink (beer, mineral waters, etc.)	0 9¼
Other expenditure	2 7

LIVING COSTS AND LABOR CONDITIONS IN SPAIN, 1940 [1]

AT THE end of 1940, the economic condition of labor in Spain seemed to be less favorable than at the beginning of the year, although there were some conditions that showed improvement. Thus it is believed that increased activities in some manufacturing industries, in construction, and in civil government employment, together with additions to the armed forces, more than offset the decline in employment which occurred in other directions and that there was less unemployment at the end of the year than at its beginning.

No strikes or labor disturbances occurred during the year.

The upward trend in wages which began in 1939 was extended during 1940, so that some 70 percent of the wage earners were affected. During the year the Government and many municipalities granted wage increases of from 15 to 25 percent to their civil employees;

[1] Data are from report of R. H. Ackerman, United States commercial attaché at Madrid.

legislation was enacted which required employers to pay wages for the weekly day of rest; and other laws became effective which made mandatory salary increases for employees of certain specific groups of occupations. Voluntary increases were granted by some employers and others were accorded at the demand of labor unions. However, these wage increases were based on the schedules in effect during 1936 and had little relation to the changes in living conditions which have occurred since that year.

The several unfavorable factors were continued widespread unemployment, the fact that many heads of families were still in prison or in concentration camps, the serious shortages of food, and the sharp rise in living costs which by far outstripped wage increases.

Cost of Living

The wholesale price index, using May 1913 as the base, or 100, stood at 177.3 for the second half of 1936 and at 236.7 as the average for 1939. This index increased each month during 1940 and by September had attained the figure of 288.5, or 70 percent higher than during 1936.

No figures are available showing a countrywide index of the cost of living, as the statistical compilation of the Ministry of Labor shows this only by Provinces and capitals of Provinces. Using July 1939 as the base, at the end of September 1940 the index for the Province of Madrid (including the capital), was 121.5 and that for the Province of Barcelona was 131.6. As the indexes for these two Provinces for the month of July 1936, were 70.2 and 70.5, respectively, it is evident that living costs had approximately doubled.

Even these indexes do not fully present the actual increase in living costs, as they are based on the official prices established for foodstuffs and other commodities. As the rations made available at official prices are insufficient to permit regular and periodic distribution to ration-card holders, many wage earners must resort, to an extent determined by their pecuniary circumstances, to the purchase of foodstuffs and other controlled commodities at extra-official or clandestine prices, which range from 50 to 200 percent above official prices.

To the distress arising from the declining purchasing power of income must be added the disorganization of the Government's rationing system, resulting in irregular and insufficient distribution of practically all rationed products. As a consequence, a condition of widespread undernourishment and unbalanced diets exists in many parts of the country.

Industrial Disputes

TREND OF STRIKES

THERE was a substantial increase in strike activity during January 1941 as compared with December 1940. The number of new strikes increased from 147 in December to 213 in January; the number of workers involved in new strikes increased from 42,600 to 89,800; and the number of man-days of idleness during all strikes increased from 458,000 in December to nearly 660,000 in January.

Comparing January 1941 with the same month in the 5 years prior to the beginning of the defense program (1935–39) there were 43 more new strikes and several thousand more workers involved this year than previously. However, the number of man-days of idleness was 353,000 below the average for January of the 5 years, 1935–39. In 4 of these 5 years, the man-days of idleness during January strikes was about the same as in January 1941. In January 1937 the number of man-days of idleness was four times as great as in January of this year.

Strikes in December 1940 and January 1941, Compared with Averages Over Preceding 5-year Period

Item	Recent strikes		Averages for 5-year period	
	January 1941	December 1940	1935–39 January	1934–38 December
Number of strikes beginning in month	213	147	170	126
Number of workers involved in strikes beginning in month	89,841	42,615	61,742	34,430
Number of man-days' idleness in all strikes in progress during month	659,821	458,314	1,012,665	859,552

In order to expedite the compilation of the annual report on strikes in 1940, the analyses of strikes occurring in November and December 1940, which normally would appear in the March and April issues of the Monthly Labor Review, have not been prepared. The report for the year 1940 is scheduled to appear as usual in the May 1941 issue of the Review. The monthly trend of 1940 strikes is shown in the table following.

Trend of Strikes, 1933 through 1940

Year and month	Number of strikes					Workers involved in strikes		Man-days idle during month or year
	Continued from preceding month	Beginning in month or year	In progress during month	Ended in month	In effect at end of month	Beginning in month or year	In progress during month	
1933	.....	1,695	.....	.....	.....	1,168,272	.....	16,872,128
1934	.....	1,856	.....	.....	.....	1,466,695	.....	19,591,949
1935	.....	2,014	.....	.....	.....	1,117,213	.....	15,456,337
1936	.....	2,172	.....	.....	.....	788,648	.....	13,901,956
1937	.....	4,740	.....	.....	.....	1,860,621	.....	28,424,857
1938	.....	2,772	.....	.....	.....	688,376	.....	9,148,273
1939	.....	2,613	.....	.....	.....	1,170,962	.....	17,812,219
1940	.....	2,508	.....	.....	.....	576,988	.....	6,700,872
1939								
January	120	203	323	184	139	51,159	72,427	513,460
February	139	204	343	204	139	68,252	88,267	553,138
March	139	210	349	199	150	43,337	64,660	618,147
April	150	281	431	255	176	396,166	425,748	4,902,238
May	176	258	434	272	162	95,239	457,407	3,547,868
June	162	245	407	269	138	62,534	127,474	958,127
July	138	251	389	216	173	175,542	211,548	1,168,382
August	173	275	448	272	176	79,670	118,772	1,101,419
September	176	197	373	222	151	36,846	103,538	892,485
October	151	205	356	217	139	106,628	139,608	1,508,120
November	139	178	317	201	116	43,239	130,341	1,664,574
December	116	106	222	128	94	12,350	37,122	384,261
1940								
January	94	128	222	124	98	26,937	41,284	246,674
February	98	172	270	153	117	29,509	38,050	289,992
March	117	178	295	187	108	22,433	43,231	386,981
April	108	228	336	214	122	39,481	53,119	441,866
May	122	239	361	239	122	53,231	77,124	665,688
June	122	214	336	190	146	38,542	56,403	484,007
July	146	244	390	227	163	63,126	82,970	585,651
August	163	231	394	253	141	61,356	90,226	706,308
September	141	253	394	242	152	65,362	108,389	780,570
October	152	267	419	253	166	71,997	107,863	915,014
November	166	207	373	243	130	62,399	101,532	739,807
December	130	147	277	168	109	42,615	61,576	458,314

STRIKES IN DEFENSE INDUSTRIES DURING 1940[1]

ALL modern industrial processes are so closely interwoven and interdependent as to make almost impossible any sharp distinction between defense and nondefense activities. An intensification of effort along any line automatically affects many other industries. An expansion of airplane production involves increased effort not only in the making of additional airplanes at the factory site but also in the materials and labor which go into building the required additional plant facilities, machine tooling and other capital equipment, power and other utility services. Additional transportation facilities for the many new workers and for the increased shipments to and from the factory must be provided; and living quarters and consumers' goods and services must be made available for the newly hired workers.

[1] Prepared by Bureau's Division of Industrial Relations.

Any interruption in the production of any of these goods or services anywhere in the country may affect defense production, although there may be no defense contract with the Government in the plant affected. A strike of bus or truck drivers transporting workers or materials to an airplane manufacturing plant, for instance, may interfere with airplane production as much as a strike of the company's own employees. A stoppage of production in a sawmill thousands of miles distant may delay the construction of cantonments or the hiring of needed workers at a powder plant, because no housing can be made ready for them.

On the other hand, the occurrence of a strike in a plant engaged in defense work does not always mean that there has been an interruption in filling a defense order; at least not to the full extent of the time lost during the strike. The defense order may include only a portion of the work in process in the plant; when the strike is settled, work may be intensified on the defense order at the expense of other regular work, or deliveries may be maintained during a short strike from stocks accumulated prior to the interruption. Occasionally, even a strike that interrupts deliveries may not impede the defense program, if the production of that particular item is running ahead of the immediate capacities to assemble the final product or if there are easily available alternative sources of supply at the moment.

For an accurate measure of the incidence of strike activity on the defense program, it would be necessary to know how an interruption on work connected, directly or indirectly, with the defense program, actually affects it; what proportion of the workers on strike in a plant having defense orders would have been engaged on such defense orders; and whether the delay in getting out those orders actually held up the completion of the finished product. This type of problem is essentially operational rather than statistical. A small strike that affects a "bottleneck" in the flow of production may be much more serious than a strike involving a larger number of workers which affects a product that may be secured with relative ease. Such problems must be considered case by case as is done, for example, by the Conciliation Service and the Labor Division of the Office of Production Management, which are chiefly responsible for dealing with industrial disputes which affect the defense program.

It should also be noted that even the most adequate strike statistics may not give a complete measure of delays in defense production caused by employer-employee maladjustments. Disputes between employers and workers may not develop into an open strike or walkout. Pent-up grievances and bad morale may result in a prolonged slowing down of work which might affect production more seriously than a complete but short stoppage of work where a settlement of

grievances has been made which workers accept as reasonable. Such a slowing down may not even be deliberate on the part of the workers but simply an unconscious reaction to what they feel are unsatisfactory working conditions.

Even though strike statistics do not provide an adequate measure of the incidence of industrial disputes on defense activity, they do show, for individual industries, the relationship between the idle time caused by strikes and the total time worked. While a small strike may have a special significance to particular operations at a given time, the strike statistics for an industry as a whole indicate whether the aggregate interruptions of production are of large or small significance.

The extent of strike activity in certain particular industries closely related to the defense program is presented below as a general background against which the current strike news may be interpreted. Eleven industries are covered in this selection from the strike statistics of 1940 as follows: aircraft, aluminum, automobiles, steel (blast furnaces, steel works, and rolling mills), electrical machinery, engines and turbines, explosives, foundries and machine shops, machine tools, sawmills and logging, and shipbuilding.

In making comparisons of the amount of strike activity among these several industries, it must be borne in mind that the relation of defense work to total work performed varies greatly. For example, most of the time worked in the airplane and shipbuilding industries was spent on defense orders, whereas only a portion of the employment in the automobile, lumber, or electrical manufacturing industries was devoted to defense purposes during the year 1940. The comparison of strike activity in these latter industries with that in the airplane and shipbuilding industries, therefore, is no accurate measure of their relative seriousness on the defense program.

Statistics of Strikes in 11 Industries, 1940

During 1940 about 2⅓ million workers were employed in these 11 industries. These employees worked a total of 569 million man-days. There were 252 strikes in these industries, which involved almost 140,000 workers and about 1½ million man-days of idleness (table 1).[1] On the average, 1 person in every 17 employed in these industries was involved in a strike sometime during the year.

[1] Preliminary strike statistics for the 11 industries covered by this report were submitted by Mr. Sidney Hillman to the Judiciary Committee of the House of Representatives on February 20, 1941. Minor revisions have been made since that time, based on the receipt of more complete information. These revisions do not alter any of the broad conclusions that may be obtained from the figures submitted by Mr. Hillman.

TABLE 1.—*Strikes in Industries Closely Related to National Defense, 1940*

Industry	Number of strikes	Number of workers involved	Number of man-days of idleness
All industries	252	139,434	1,460,331
Aircraft	3	6,270	36,402
Aluminum	4	9,064	30,866
Automobiles	29	25,579	104,377
Blast furnaces, steel works, and rolling mills	25	20,586	134,769
Electrical machinery, apparatus, and supplies	34	8,906	393,572
Engines, turbines, tractors, and water wheels	1	531	7,434
Explosives	2	213	3,033
Foundries and machine shops	51	17,595	257,971
Machine tools	6	677	11,736
Sawmills, logging camps, and millwork	84	35,488	431,930
Shipbuilding	13	14,531	48,241

The proportion of workers involved in strikes varied greatly among the 11 different industries (table 2). In the important machine-tool industry only 1 person in every 97 workers engaged in the industry was involved in any strike during the year. In the aluminum industry, on the other hand, every third worker participated in a strike. Practically all of these were involved in either the 1-day strike at the Arnold, Pa., plant of the Aluminum Company of America in August, or the week's strike at the New Kensington, Pa., plant of the same company in November. One shipbuilding worker out of every 6 was involved in a strike; and two-thirds of the total were involved in two strikes—a 1-day strike at the Federal Shipbuilding & Dry Dock Co. at Kearney, N. J., at the end of May, and a 2-week strike at the Bethlehem Shipbuilding Corporation at Sparrows Point, Md., in September and October.

TABLE 2.—*Number of Workers Involved in Strikes in 11 Industries Closely Related to National Defense, Compared with Total Employees* [1]

Industry	Total number of employees	Proportion involved in strikes	Industry	Total number of employees	Proportion involved in strikes
All industries	2,371,700	1 out of 17.	Explosives	7,600	1 out of 36.
Aircraft	90,100	1 out of 14.	Foundries and machine shops.	402,600	1 out of 23.
Aluminum	28,300	1 out of 3.	Machine tools	66,000	1 out of 97.
Automobiles	447,600	1 out of 17.	Sawmills, logging camps, and millwork.	[2] 459,800	1 out of 13.
Blast furnaces, steel works, and rolling mills.	483,700	1 out of 24.	Shipbuilding	93,700	1 out of 6.
Electrical machinery	240,100	1 out of 27.			
Engine manufacturing	52,200	1 out of 98.			

[1] Employment figures are averages for the year 1940.
[2] With allowance for independent logging camps which are included in the strike data but are excluded from the regularly published employment figures.

The number of man-days of idleness during strikes in these 11 industries amounted to about one-quarter of 1 percent of the total days worked. In other words, for every 390 days worked, 1 day was lost during strikes. In 7 of these industries (aircraft, automobiles, engines, explosives, machine tools, shipbuilding, and steel) the amount

of idleness during strikes was less than one-quarter of 1 percent of time worked. The greatest proportion of idleness during strikes was in electrical machinery manufacturing—almost seven-tenths of 1 percent. Almost one-third of the man-days of idleness in this industry was due to a strike at the Leviton Manufacturing Co., in Brooklyn, N. Y., which is not engaged in defense work.

Over 96 percent of the man-days of idleness in the aircraft industry took place during the strike at the Vultee Aircraft Corporation in Downey, Calif., in November. In this strike about 5,000 workers were idle for 7 working days. Almost one-fourth of the total days of idleness during strikes in the lumber industry was due to the stoppage of work during December, in sawmill and logging camps in western Washington and Oregon, which lasted about 2 weeks.

TABLE 3.—*Man-Days of Idleness During Strikes in 11 Industries Closely Related to National Defense, Compared with Man-Days Worked, 1940* [1]

Industry	Minimum number of man-days worked	Man-days of idleness as a percent of man-days worked	Number of man-days worked per man-day of idleness
All industries	569,208,000	0.26	390
Aircraft	21,624,000	.17	594
Aluminum	6,792,000	.45	220
Automobiles	107,424,000	.10	1,029
Blast furnaces, steel works, and rolling mills	116,088,000	.12	861
Electrical machinery	57,624,000	.68	146
Engine manufacturing	12,528,000	.06	1,685
Explosives	1,824,000	.16	601
Foundries and machine shops	96,624,000	.27	375
Machine tools	15,840,000	.07	1,350
Sawmills, logging camps, and millwork	[2] 110,352,000	.39	255
Shipbuilding	22,488,000	.21	466

[1] Days worked estimated as average employment times 240 days per year.
[2] With allowance for independent logging camps which are included in the strike data but are excluded from the regularly published employment figures.

ACTIVITIES OF THE UNITED STATES CONCILIATION SERVICE, FEBRUARY 1941

THE United States Conciliation Service, in February, disposed of 418 situations, involving 171,711 workers. The services of this agency were requested by the employers, employees, and other interested parties. Of these situations, 266 were strikes, threatened strikes, lock-outs, and controversies, involving 157,808 workers. The remaining situations, involving 13,903 workers, included such services as filling requests for information, adjusting complaints, consulting with labor and management, etc.

The facilities of the Service were used in 28 major industrial fields, such as building trades, and the manufacture of foods, iron and steel, textiles, etc. (table 1), and were utilized by employees and employers in 42 States and the District of Columbia (table 2).

TABLE 1.—*Situations Disposed of by U. S. Conciliation Service, February 1941, by Industries*

Industry	Disputes		Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
All industries	266	157,808	152	13,903	418	171,711
Agriculture	3	4,706			3	4,706
Automobile	10	15,093	1	7	11	15,100
Building trades	43	39,609	30	788	73	40,397
Chemicals	4	437			4	437
Communications	2	406	1	1	3	407
Domestic and personal	7	465	4	49	11	514
Electrical equipment	6	1,858	1	5	7	1,863
Food	24	3,246	12	1,022	36	4,268
Furniture	14	3,909	5	876	19	4,785
Iron and steel	30	14,583	10	1,315	40	15,898
Leather	2	391	2	701	4	1,092
Lumber	13	4,302	1	1	14	4,303
Machinery	21	11,022	12	758	33	11,780
Maritime	3	220	3	1,054	6	1,274
Mining	3	4,950	3	242	6	5,192
Nonferrous metals	12	4,879			12	4,879
Paper	3	1,570	1	1	4	1,571
Petroleum	2	234	1	52	3	286
Printing	1	14	3	3	4	17
Professional			1	1	1	1
Rubber	3	2,841	3	141	6	2,982
Stone, clay, and glass	8	2,317	5	506	13	2,823
Textile	14	7,094	17	2,358	31	9,452
Tobacco	2	1,828	1	600	3	2,428
Trade	9	340	7	120	16	460
Transportation	9	2,997	10	735	19	3,732
Transportation equipment	7	26,411	3	203	10	26,614
Utilities	5	819			5	819
Unclassified	6	1,267	15	2,364	21	3,631

TABLE 2.—*Situations Disposed of by U. S. Conciliation Service, February 1941, by States*

State	Disputes		Other situations		Total	
	Number	Workers involved	Number	Workers involved	Number	Workers involved
All States	266	157,808	152	13,903	418	171,711
Alabama	9	4,432	1	2	10	4,434
Arkansas			4	259	4	259
Arizona	2	251			2	251
California	20	28,165	24	519	44	28,684
Colorado	1	100	2	2	3	102
Connecticut	3	1,582	2	5	5	1,587
Delaware	1	75			1	75
District of Columbia	4	246	5	55	9	301
Florida	10	187	9	818	19	1,005
Georgia	11	4,166	3	582	14	4,748
Illinois	7	1,729	2	227	9	1,956
Indiana	13	13,627	4	131	17	13,758
Iowa			2	2	2	2
Kentucky	3	241	2	251	5	492
Louisiana	5	15,636	2	425	7	16,061
Maine	1	750			1	750
Maryland	1	22	4	209	5	231
Massachusetts	4	1,331	6	258	10	1,589
Michigan	19	9,839	7	1,396	26	11,235
Minnesota	3	629			3	629
Mississippi	2	3,522	1	2	3	3,524
Missouri	12	610	6	760	18	1,370
Montana	1	50	1	2	2	52
Nebraska			1	10	1	10
New Jersey	6	3,134	5	1,047	11	4,181
New Mexico	2	2,304	2	5	4	2,309
New York	13	4,756	12	2,509	25	7,265
North Carolina	9	3,980	4	15	13	3,995
Ohio	27	16,960	7	1,227	34	18,187
Oklahoma	1	549	2	27	3	576
Oregon	5	2,195	4	803	9	2,998
Pennsylvania	15	10,312	6	69	21	10,381
Rhode Island	1	3,000	1	300	2	3,300
South Carolina			1	800	1	800
Tennessee	2	173	2	295	4	468
Texas	2	134	6	263	8	397
Utah	1	45			1	45
Vermont	1	120			1	120
Virginia	15	7,545	2	402	17	7,947
Washington	9	3,000	7	10	16	3,010
West Virginia	10	4,444	2	16	12	4,460
Wisconsin	14	5,567	1	200	15	5,767
Wyoming	1	2,400			1	2,400

Labor Turn-Over

LABOR TURN-OVER IN MANUFACTURING, JANUARY 1941

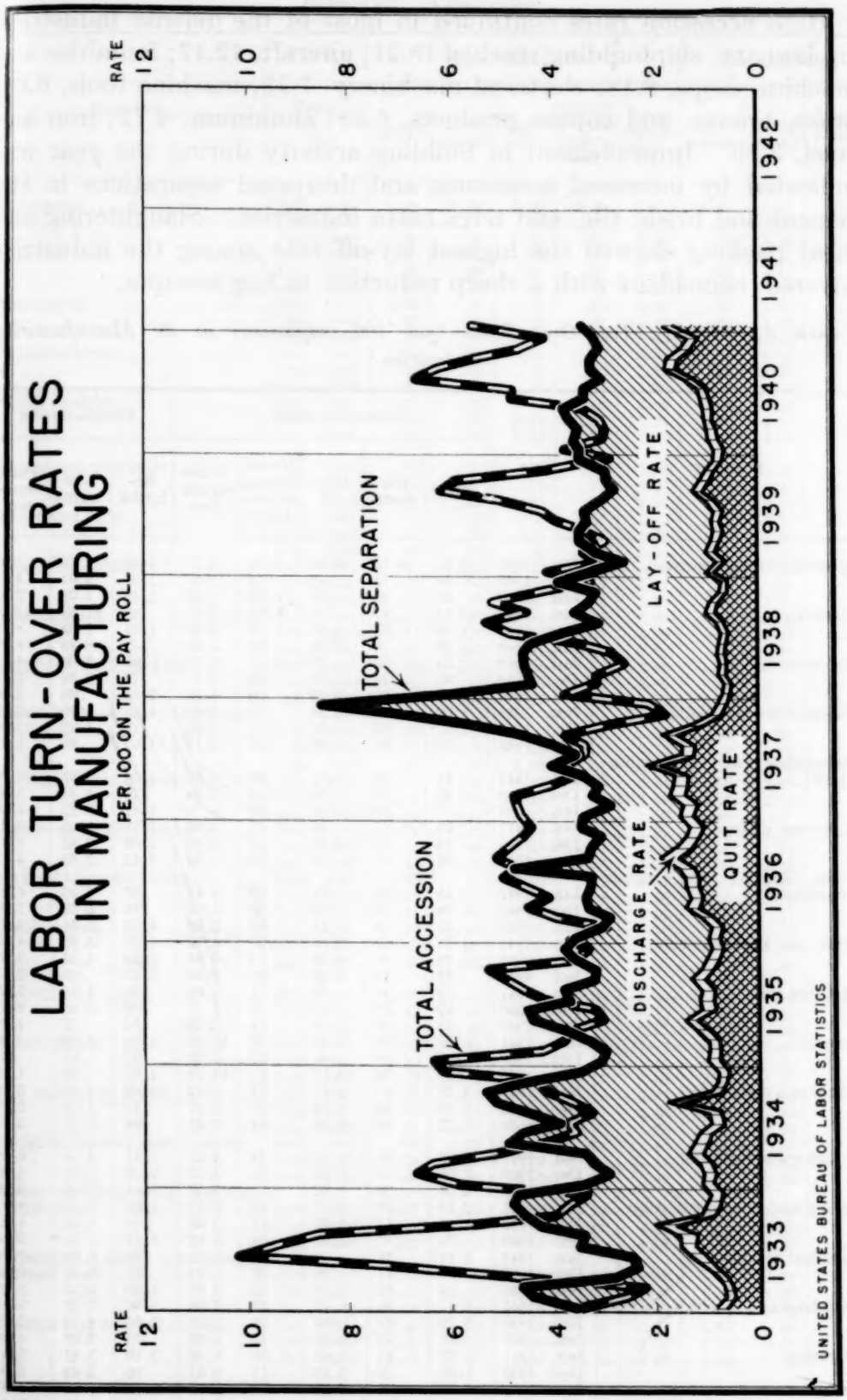
REFLECTING the intensified demand for workers resulting from the defense program, the accession rate in manufacturing industries in January 1941 reached the highest level for any January since 1935. Returns from some 7,000 manufacturing establishments with nearly 2,900,000 wage earners showed an average accession rate of 5.54, indicating the hiring of nearly 6 workers per 100 employees on the pay roll. In January 1940, the accession rate for all manufacturing was 3.74.

The separation rate in January 1941 was 3.41 as compared with 3.43 in the corresponding month of 1940. Quit rates have risen sharply since January 1940, lay-offs have declined, and employers have taken on new workers in increasing numbers.

TABLE 1.—*Monthly Labor Turn-Over Rates in Representative Factories in 135 Industries* [1]

Class of turn-over and year	January	February	March	April	May	June	July	August	September	October	November	December	Average
Separations:													
Quits:													
1941	1.31												
1940	.63	0.62	0.67	0.74	0.77	0.78	0.85	1.10	1.37	1.31	1.10	0.99	0.91
Discharges:													
1941	.18												
1940	.14	.16	.15	.13	.13	.14	.14	.16	.16	.19	.18	.16	.15
Lay-offs: [2]													
1941	1.61												
1940	2.55	2.67	2.53	2.69	2.78	2.32	2.25	1.63	1.48	1.53	1.60	1.86	2.16
Miscellaneous separations:													
1941	.31												
1940	.11	.11	.11	.10	.10	.12	.11	.11	[3].21	[3].20	[3].18	[3].15	[3].13
Total:													
1941	3.41												
1940	3.43	3.56	3.46	3.66	3.78	3.36	3.35	3.00	3.22	3.23	3.06	3.16	3.35
Accessions:													
Rehirings:													
1941	1.45												
1940	1.96	1.26	1.38	1.42	1.49	2.06	1.94	3.04	2.20	1.22	1.18	1.13	1.69
New hirings:													
1941	4.09												
1940	1.78	1.72	1.56	1.63	1.87	2.70	2.83	3.59	4.01	4.30	3.47	2.98	2.70
Total:													
1941	5.54												
1940	3.74	2.98	2.94	3.05	3.36	4.76	4.77	6.63	6.21	5.52	4.65	4.11	4.39

[1] The various turn-over rates represent the number of quits, discharges, lay-offs, total separations, and accessions per 100 employees.
[2] Including temporary, indeterminate, and permanent lay-offs.
[3] Beginning with September 1940, workers leaving to enter the Army or Navy are included in "miscellaneous separations."


LABOR TURN-OVER RATES IN MANUFACTURING
PER 100 ON THE PAY ROLL
RATE
12
10
8
6
4
2
0
TOTAL ACCESSION
TOTAL SEPARATION
DISCHARGE RATE
LAY-OFF RATE
QUIT RATE
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
UNITED STATES BUREAU OF LABOR STATISTICS

Labor Turn-Over, by Industries

High accession rates continued in most of the defense industries. In January, shipbuilding reached 18.21; aircraft, 12.17; foundries and machine shops, 8.18; electrical machinery, 7.75; machine tools, 6.68; brass, bronze, and copper products, 6.58; aluminum, 4.72; iron and steel, 3.29. Improvement in building activity during the year was indicated by increased accessions and decreased separations in the cement and brick, tile, and terra cotta industries. Slaughtering and meat packing showed the highest lay-off rate among the industries covered, coincident with a sharp reduction in hog receipts.

TABLE 2.—*Monthly Turn-Over Rates (per 100 employees) in 39 Manufacturing Industries* [1]

Industry	Date	Separation rates					Accession rates		
		Quit [2]	Discharge	Lay-off	Miscellaneous separation [3]	Total separation	Rehiring	New hiring	Total accession
Agricultural implements	Jan. 1941	0.81	0.16	0.42	0.18	1.57	1.30	4.19	5.49
	Dec. 1940	.56	.13	.45	.13	1.27	1.20	3.01	4.21
	Jan. 1940	.23	.08	.68	.06	1.05	1.40	1.28	2.68
Aircraft	Jan. 1941	2.44	.45	.33	.43	3.65	.68	11.49	12.17
	Dec. 1940	1.98	.38	.37	.19	2.92	1.01	7.62	8.63
	Jan. 1940	1.38	.73	1.89	.03	4.03	.27	8.39	8.66
Aluminum	Jan. 1941	1.28	.32	.42	1.17	3.19	.82	3.90	4.72
	Dec. 1940	.85	.24	.74	.38	2.21	.77	2.39	3.16
	Jan. 1940	.52	.21	3.48	.35	4.56	2.61	.95	3.56
Automobiles and bodies	Jan. 1941	1.00	.09	2.24	.32	3.65	1.67	1.40	3.07
	Dec. 1940	1.07	.05	1.54	.23	2.89	.77	1.32	2.09
	Jan. 1940	.75	.06	1.26	.05	2.12	1.01	.86	1.87
Automobile parts and equipment	Jan. 1941	1.41	.33	2.51	.36	4.61	1.64	5.37	7.01
	Dec. 1940	1.23	.27	2.18	.15	3.83	.76	4.34	5.10
	Jan. 1940	.77	.25	4.59	.09	5.70	1.41	3.22	4.63
Boots and shoes	Jan. 1941	.93	.17	.84	.15	2.09	1.71	3.58	5.29
	Dec. 1940	.75	.10	2.40	.15	3.40	2.59	2.83	5.42
	Jan. 1940	.63	.12	1.19	.05	1.99	2.12	2.30	4.42
Brass, bronze, and copper products	Jan. 1941	1.45	.20	.81	.45	2.91	.67	5.91	6.58
	Dec. 1940	1.08	.19	.48	.06	1.81	.18	5.02	5.20
	Jan. 1940	.37	.12	2.42	.05	2.96	4.38	3.61	7.99
Brick, tile, and terra cotta	Jan. 1941	1.71	.19	2.56	.27	4.73	1.09	3.83	4.92
	Dec. 1940	1.26	.20	4.26	.12	5.84	2.39	1.54	3.93
	Jan. 1940	.45	.14	8.95	.05	9.59	1.87	.65	2.52
Cast-iron pipe	Jan. 1941	.73	.33	.52	.11	1.69	.33	1.85	2.18
	Dec. 1940	.82	.27	.45	.21	1.75	.29	2.16	2.45
	Jan. 1940	.38	.07	1.69	.14	2.28	.52	.72	1.24
Cement	Jan. 1941	.56	.06	9.38	.26	10.26	1.24	1.32	2.56
	Dec. 1940	.29	.08	4.96	.27	5.60	.07	.87	.94
	Jan. 1940	.20	.06	13.76	.11	14.13	1.57	.28	1.85
Cigars and cigarettes	Jan. 1941	2.92	.11	2.75	.34	6.12	3.86	1.85	5.71
	Dec. 1940	1.10	.28	3.54	.25	5.17	.37	1.91	2.28
	Jan. 1940	1.77	.19	3.35	.04	5.35	.94	2.21	3.15
Cotton manufacturing	Jan. 1941	2.35	.26	1.12	.34	4.07	1.31	4.74	6.05
	Dec. 1940	1.68	.19	1.04	.21	3.12	1.10	2.98	4.08
	Jan. 1940	1.14	.20	2.02	.21	3.57	1.64	2.02	3.66
Dyeing and finishing textiles	Jan. 1941	2.19	.16	1.77	.45	4.57	1.08	3.63	4.71
	Dec. 1940	1.54	.17	1.23	.14	3.08	.94	3.38	4.32
	Jan. 1940	.71	.11	2.52	.08	3.42	1.64	1.30	2.94
Electrical machinery	Jan. 1941	1.14	.18	.80	.59	2.71	.89	6.86	7.75
	Dec. 1940	.77	.11	.60	.26	1.74	.67	5.21	5.88
	Jan. 1940	.54	.10	2.10	.22	2.96	1.03	2.33	3.36
Foundries and machine shops	Jan. 1941	1.47	.38	.75	.39	2.99	.96	7.22	8.18
	Dec. 1940	1.13	.33	.94	.19	2.59	1.05	4.77	5.82
	Jan. 1940	.52	.15	1.46	.10	2.23	.75	2.63	3.38
Furniture	Jan. 1941	1.67	.23	2.80	.38	5.08	2.10	3.41	5.51
	Dec. 1940	1.06	.23	3.23	.11	4.63	.40	2.64	3.04
	Jan. 1940	.63	.21	2.82	.08	3.74	2.22	1.72	3.94
Glass	Jan. 1941	.72	.19	1.65	.48	3.04	.81	2.66	3.47
	Dec. 1940	.55	.11	1.18	.20	2.04	.79	2.02	2.81
	Jan. 1940	.27	.05	2.97	.08	3.37	.99	.59	1.58

See footnotes at end of table.

TABLE 2.—*Monthly Turn-Over Rates (per 100 employees) in 39 Manufacturing Industries*[1]—Continued

Industry	Date	Separation rates					Accession rates		
		Quit [2]	Discharge	Layoff	Miscellaneous separation [2]	Total separation	Rehiring	New hiring	Total accession
Hardware	Jan. 1941	2.86	0.23	1.20	0.18	4.47	0.40	6.52	6.92
	Dec. 1940	1.85	.21	.51	.10	2.67	.50	5.14	5.64
	Jan. 1940	.86	.19	1.65	.14	2.84	.59	2.38	2.97
Iron and steel	Jan. 1941	.69	.09	.30	.39	1.47	.51	2.78	3.29
	Dec. 1940	.60	.09	.23	.21	1.13	.60	2.18	2.78
	Jan. 1940	.42	.07	1.56	.12	2.17	.55	.60	1.15
Knit goods	Jan. 1941	1.30	.08	1.70	.18	3.26	.69	2.42	3.11
	Dec. 1940	1.06	.09	1.28	.07	2.50	.64	1.55	2.19
	Jan. 1940	.67	.10	2.00	.06	2.83	1.77	1.31	3.08
Machine tools	Jan. 1941	1.77	.31	.09	.27	2.44	.37	6.31	6.68
	Dec. 1940	.98	.23	.19	.12	1.52	.11	4.37	4.48
	Jan. 1940	.91	.45	.35	.14	1.85	.10	5.56	5.66
Men's clothing	Jan. 1941	1.21	.24	1.37	.10	2.92	3.98	3.34	7.32
	Dec. 1940	.98	.22	3.01	.06	4.27	4.26	2.14	6.40
	Jan. 1940	.60	.08	1.60	.11	2.39	3.08	2.06	5.14
Paints and varnishes	Jan. 1941	.86	.27	.49	.26	1.88	1.39	1.93	3.32
	Dec. 1940	.88	.17	.83	.19	2.07	.58	1.47	2.05
	Jan. 1940	.44	.12	1.45	.08	2.09	.53	2.42	2.95
Paper and pulp	Jan. 1941	.77	.13	.55	.27	1.72	.49	2.02	2.51
	Dec. 1940	.53	.10	.86	.17	1.66	.55	1.30	1.85
	Jan. 1940	.40	.12	1.29	.13	1.94	.34	1.04	1.38
Petroleum refining	Jan. 1941	.42	.05	1.26	.19	1.92	.48	.45	.93
	Dec. 1940	.37	.04	.59	.17	1.17	.12	.45	.57
	Jan. 1940	.24	.05	1.87	.09	2.25	.92	1.31	2.23
Planing mills	Jan. 1941	1.44	.20	3.51	.25	5.40	.80	3.00	3.80
	Dec. 1940	1.14	.23	2.36	.13	3.86	.85	3.17	4.02
	Jan. 1940	.92	.16	5.37	.20	6.65	.99	1.58	2.57
Printing: Book and job	Jan. 1941	1.48	.32	3.58	.25	5.63	1.60	3.19	4.79
	Dec. 1940	.88	.11	4.58	.12	5.69	1.79	2.51	4.30
	Jan. 1940	.39	.24	4.27	.05	4.95	2.74	1.87	4.61
Printing: Newspapers and periodicals	Jan. 1941	.32	.07	2.37	.18	2.94	.94	.91	1.85
	Dec. 1940	.37	.05	1.73	.08	2.23	1.53	.75	2.28
	Jan. 1940	.37	.06	2.03	.17	2.63	.95	.83	1.78
Radios and phonographs	Jan. 1941	1.57	.16	4.22	.19	6.14	1.58	2.06	3.64
	Dec. 1940	1.50	.10	2.25	.04	3.89	2.08	2.34	4.42
	Jan. 1940	1.49	.18	7.27	.02	8.96	.91	.77	1.68
Rayon and allied products	Jan. 1941	.79	.15	.19	.19	1.32	1.64	1.38	3.02
	Dec. 1940	.55	.08	.38	.14	1.15	.31	1.71	2.02
	Jan. 1940	.44	.06	.81	.03	1.34	.62	2.31	2.93
Rubber boots and shoes	Jan. 1941	1.97	.17	2.29	.22	4.65	.52	2.15	2.67
	Dec. 1940	1.03	.18	.04	.38	1.63	.98	7.00	7.98
	Jan. 1940	.71	.24	3.63	.28	4.86	4.25	.34	4.59
Rubber tires	Jan. 1941	.77	.05	.84	.29	1.95	.60	3.87	4.47
	Dec. 1940	.63	.06	.39	.17	1.25	1.00	3.74	4.74
	Jan. 1940	.25	.06	2.55	.02	2.88	.58	.37	.95
Sawmills	Jan. 1941	1.33	.17	2.94	.22	4.66	1.85	2.53	4.38
	Dec. 1940	1.12	.19	4.63	.21	6.15	1.37	2.52	3.89
	Jan. 1940	.80	.22	4.90	.15	6.07	1.79	1.50	3.29
Shipbuilding	Jan. 1941	1.93	.41	4.78	.79	7.91	5.71	12.50	18.21
	Dec. 1940	1.89	.31	4.53	.72	7.45	3.83	8.50	12.33
	Jan. 1940	.73	.07	3.12	.10	4.02	2.50	3.53	6.03
Silk and rayon goods	Jan. 1941	1.94	.13	1.58	.18	3.83	2.08	2.22	4.30
	Dec. 1940	1.19	.04	3.25	.07	4.55	2.30	1.14	3.44
	Jan. 1940	.87	.07	4.68	.03	5.65	1.31	1.29	2.60
Slaughtering and meat packing	Jan. 1941	.98	.25	10.89	.31	12.43	5.87	1.34	7.21
	Dec. 1940	.95	.25	7.72	.23	9.15	3.74	4.02	7.76
	Jan. 1940	.60	.16	4.39	.25	5.40	4.62	3.92	8.54
Steam and hot water heating apparatus	Jan. 1941	1.57	.28	.38	.33	2.56	.44	4.14	4.58
	Dec. 1940	1.11	.17	1.01	.10	2.39	.28	2.60	2.88
	Jan. 1940	.49	.12	1.14	.10	1.85	.76	1.39	2.15
Structural and ornamental metal work	Jan. 1941	1.30	.22	1.73	.23	3.48	.64	5.71	6.35
	Dec. 1940	1.38	.19	2.75	.22	4.54	1.34	4.83	6.17
	Jan. 1940	.77	.05	10.66	.24	11.72	7.01	5.73	12.74
Woolen and worsted goods	Jan. 1941	2.43	.15	.88	.35	3.81	1.60	3.70	5.30
	Dec. 1940	1.81	.12	1.96	.15	4.04	1.75	2.58	4.33
	Jan. 1940	1.52	.10	3.64	.13	5.39	4.22	1.79	6.01

[1] No individual industry data shown unless reports cover at least 25 percent of industrial employment
[2] Beginning with September 1940, workers leaving to enter the Army or Navy are included in "miscellaneous separations."

Defense industries showed exceptionally high new-hiring rates as well. An increase in the quit rate over the year interval occurred in 38 of the 39 industries for which separate rates were computed. This increase in the number of voluntary separations indicates that many workers are shifting jobs because of opportunities for reemployment under more favorable conditions.

LABOR TURN-OVER IN THE RUBBER INDUSTRY, 1939 AND 1940

THIS analysis of labor turn-over in the rubber industry is based on reports received from 47 identical establishments that reported turn-over each month during the years 1939 and 1940. These companies employed nearly 59,000 workers in 1939 and 61,000 in 1940, representing approximately 50 percent of the total employment in the rubber industry, based on the 1939 Census of Manufactures.

The rubber industry is divided into 3 distinct branches, manufacturing (*a*) tires and inner tubes, (*b*) rubber boots and shoes, and (*c*) miscellaneous rubber products. Of these the tire branch is the most important, employing the largest group of workers and having the greatest pay roll. It is highly centralized, geographically, the largest plants being in Ohio.

Rubber Industry Compared With All Manufacturing

Turn-over rates in the rubber industry as a whole moved in the same direction as those for all manufacturing from 1939 to 1940. The slight decrease shown in the lay-off rate was more than offset by increases in the quit and discharge rates. As a result the total separation rate in 1940 was above that in 1939. Although the increases in the accession rates were virtually of the same magnitude for both the rubber industry and for the entire manufacturing group, in both years the hiring rates for the rubber industry were considerably lower than the rates for all industries combined. The comparatively low turn-over rates in the rubber industry may be attributed principally to those in the tire branch. In the rubber industry as a whole the total separation rates for 1939 and 1940 were more than 25 percent higher than those in the tire industry, and the accession rates were more than a third higher. In 1939 the total separation rate for plants manufacturing rubber boots and shoes was almost identical with the rate for all manufacturing. In 1940, however, when the rate for all manufacturing declined to 40.27, the rate for the rubber footwear industry dropped to 33.61 per 100 employees. The accession rate showed a much greater increase for rubber footwear (i. e., from 34.99 in 1939 to 50.42 in 1940) than for manufacturing as a whole (48.85 to 52.72). The total separa-

tion rates for plants manufacturing miscellaneous rubber products were higher in both years than those for any other group. The comparatively high separation rates were accompanied by high accession rates. In 1939 workers were hired at the rate of 57.11 and in 1940, 58.97 per 100 employees.

TABLE 1.—*Labor Turn-Over in All Manufacturing and in the Three Branches of the Rubber Industry, 1939 and 1940* [1]

Industry	Separations								Accessions	
	Quits		Discharges		Lay-offs [2]		Total			
	1940	1939	1940	1939	1940	1939	1940	1939	1940	1939
All manufacturing	12.54	9.52	1.84	1.52	25.89	26.67	40.27	37.71	52.72	48.85
Rubber industry	10.23	7.61	1.04	.86	21.61	21.78	32.88	30.25	42.02	38.75
Tires and inner tubes	6.70	5.90	.63	.72	17.75	13.44	25.08	20.06	30.73	32.62
Rubber boots and shoes	13.12	9.08	1.62	.84	18.87	28.05	33.61	37.97	50.42	34.99
Rubber products, not otherwise classified	15.22	9.88	1.37	1.21	33.18	33.93	49.77	45.02	58.97	57.11

[1] The various turn-over rates represent the number of quits, discharges, lay-offs, total separations, and accessions per 100 employees.
[2] Including temporary, indeterminate, and permanent lay-offs.

Turn-Over Rates in the Rubber Industry, by Size of Plant

More stabilized employment conditions were indicated in the larger plants in 1939 and 1940. Establishments with fewer than 1,000 workers on the pay roll registered a total separation rate of 61.43 in 1939 and 58.54 per 100 employees in 1940 (table 2). Companies with 1,000 or more employees reported separations at the rate of 20.57 in 1939 and 22.82 in 1940. The high separation rates in the smaller plants were accompanied by correspondingly high accession rates, indicating partial suspension of operations at various times during the two years. The rates for accessions were more than twice as great for the small plants in both years; in 1939 they hired workers at the rate of 64.66, and in 1940, at 71.14 per 100 employees, as compared with 30.69 and 33.06, respectively, in the larger plants. Further indication of irregular production schedules in the smaller establishments appears in the fact that approximately 50 workers out of every 100 in 1939 and 41 in 1940 were laid off by them some time during each of the two years. In the larger plants only about 13 in 1939, and 16 in 1940, of every 100 workers were reported as lay-offs. For persons rehired and persons newly hired, no data are available prior to January 1940; the same workers may have figured several times in the rates as lay-offs and new employees. Turn-over reports received in 1940, however, indicate a ratio of approximately 2 workers rehired to 3 newly hired.

TABLE 2.—*Labor Turn-Over Rates in the Rubber Industry, by Product and Size of Plant,*[1] *1939 and 1940*

Branch of industry and class of turn-over	Rate per 100 employees in—			
	1940		1939	
	Small plants	Large plants	Small plants	Large plants
Rubber industry:				
Separations	58.54	22.82	61.43	20.57
Quits	15.69	6.38	9.78	6.94
Discharges	1.88	.78	1.18	.77
Lay-offs	40.97	15.66	50.47	12.86
Accessions	71.14	33.06	64.66	30.69
Tires and inner tubes:				
Separations	37.08	22.17	29.28	18.21
Quits	10.31	5.83	8.69	5.34
Discharges	1.25	.48	.75	.72
Lay-offs	25.52	15.86	19.84	12.15
Accessions	29.71	30.98	31.05	32.93
Rubber boots and shoes:				
Separations	42.03	31.04	70.74	28.31
Quits	12.35	13.36	5.23	10.22
Discharges	2.68	1.30	.53	.93
Lay-offs	27.00	16.38	64.98	17.16
Accessions	70.59	44.24	59.67	27.72
Miscellaneous rubber products:				
Separations	76.89	40.82	62.21	38.69
Quits	19.05	13.95	13.92	8.39
Discharges	2.32	1.06	1.38	1.15
Lay-offs	55.52	25.81	46.91	29.15
Accessions	80.26	51.94	81.88	47.99

[1] "Large plants" include those having 1,000 or more employees, in the rubber industry as a whole and in footwear manufacture, 1,500 or over in tire manufacture, and 400 or over in the manufacture of miscellaneous products. Plants having less than these numbers of employees were classified as "small."

In the rubber industry as a whole the 32 smaller plants employed 14,234 workers in 1940 and 13,859 in 1939, and the 15 larger plants 46,244 in 1940 and 44,560 in 1939. In the tire branch of the industry the 6 smaller plants employed 6,257 in 1940 and 5,085 in 1939, and the 6 larger plants 25,646 in 1940 and 25,265 in 1939. In the rubber footwear branch the 6 smaller plants employed 3,400 in 1940 and 3,387 in 1939, and the 3 larger plants 11,093 in 1940 and 11,496 in 1939. In the manufacture of miscellaneous products the 15 smaller plants employed 3,496 in 1940 and 3,549 in 1939, and the 10 larger plants 10,586 in 1940 and 9,637 in 1939.

Manufacture of tires and inner tubes.—The variations in turn-over rates by size of plants were not so great in the manufacture of tires as in the industry as a whole (table 3). Some similarity in the turn-over experience, however, was shown by the fact that separation rates were higher in both years in plants with fewer than 1,500 employees. The accession rates were nearly identical in both groups. It is of particular interest that the rate for voluntary separations was much lower in the larger plants in both years. The reason for this cannot be determined from the data at hand. The smaller establishments reported a lay-off rate of 19.84 in 1939 and 25.52 in 1940 as compared with 12.15 and 15.86, respectively, for the larger plants. The discharge rates were also lower in the larger establishments.

Manufacture of rubber boots and shoes.—Contrary to the experience for the tire companies, the quit rate in plants manufacturing rubber boots and shoes was lower in both years in the smaller establishments. In 1939 the voluntary separation rate was 10.22 in the larger firms and 5.23 in the smaller ones, as against 13.36 and 12.35, respectively, in 1940. The discharge rate was lower in the smaller plants in 1939 but in 1940 the reverse was true. An outstanding feature was the decline

in the lay-off rate in the smaller plants from 64.98 in 1939 to 27.00 per 100 employees in 1940, while the rate for lay-offs in the larger establishments remained virtually on the same level, 17.16 in 1938 and 16.38 in 1940. The hiring rate was much higher for the smaller firms in both years.

Manufacture of miscellaneous rubber products.—A nominal decrease was indicated in the lay-off rate in 1940, compared with the preceding year, in miscellaneous-products plants with more than 400 workers on the pay roll. In the smaller plants, however, the rate for lay-offs increased from 46.91 in 1939 to 55.52 in 1940. Total separations were higher in 1940 than in 1939 in both groups. Partly responsible for the increase were the higher quit rates. In the smaller plants this type of separations increased from 13.92 in 1939 to 19.05 in 1940. The increase for the corresponding period in the larger plants was from 8.39 to 13.95 per 100 employees. As a rule higher quit rates indicate an improved labor market with greater employment opportunities. The discharge rate for the smaller firms increased from 1.38 in 1939 to 2.32 in 1940. A slight decrease from 1.15 to 1.06 was shown for the larger plants.

Turn-Over Rates in Identical Plants

In 1939 three-fourths of the employees were in plants with quit rates of less than 10 percent; in 1940 the proportion decreased to about three-fifths (table 3). Those in plants with quit rates of 10 and under 20 increased from one-fifth in 1939 to nearly one-third in 1940. A substantial increase was indicated also in the firms having a quit rate of more than 20 per 100 employees; 9 percent of the firms with less than 3 percent of the employees in 1939 increased to 21 percent with 7 percent of the workers in 1940.

Plants having a discharge rate of less than 1 percent decreased from 64 percent in 1939 to 55 percent in 1940, but the number of their employees remained virtually unchanged. In the higher brackets, firms with a discharge rate of more than 3 for every 100 workers increased from 11 to 15 percent.

Approximately two-thirds of the workers were employed in plants having fewer than 20 lay-offs for every 100 employees in both years. In the groups reporting lay-offs of from 40 to 90, however, there was a marked increase in the number of firms in 1940 compared with 1939. The number of establishments having a lay-off rate of 90 or more decreased from 13 to 9 percent.

About 25 percent of the plants with 50 percent of the employees registered a total separation rate of less than 20 per 100 workers in both years. In the groups with 40 to 90 the number of firms increased from 21 to 40 percent and the employees increased from 7 percent to 38 percent.

TABLE 3.—*Distribution of Identical Plants in the Rubber Industry by Turn-Over Rates, 1939 and 1940* [1]

INDUSTRY AS A WHOLE (47 PLANTS)

Class and rate of turn-over	Establishments				Employees			
	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage
	1940		1939		1940		1939	
Quits:								
Under 2.5	12.8	12.8	12.8	12.8	4.1	4.1	5.0	5.0
2.5 and under 5.0	8.5	21.3	14.9	27.7	20.5	24.6	25.5	30.5
5.0 and under 7.5	14.8	36.1	12.8	40.5	24.6	49.2	24.6	55.1
7.5 and under 10	8.5	44.6	19.1	59.6	12.3	61.5	20.8	75.9
10 and under 15	14.9	59.5	19.1	78.7	15.7	77.2	16.6	92.5
15 and under 20	19.1	78.6	12.8	91.5	15.4	92.6	5.0	97.5
20 and under 25	6.4	85.0	4.3	95.8	2.8	95.4	2.0	99.5
25 and under 30	4.3	89.3	2.1	97.9	.8	96.2	.2	99.7
30 and under 35	4.3	93.6	2.1	100.0	.8	97.0	.3	100.0
35 and over	6.4	100.0	0		3.0	100.0	0	
Total	100.0		100.0		100.0		100.0	
Discharges:								
Under 0.2	17.0	17.0	23.4	23.4	4.4	4.4	6.3	6.3
0.2 and under 0.4	12.8	29.8	8.5	31.9	22.7	27.1	20.8	27.1
0.4 and under 0.5	4.3	34.1	8.5	40.4	19.6	46.7	20.9	48.0
0.5 and under 0.8	17.0	51.1	21.3	61.7	18.6	65.3	19.9	67.9
0.8 and under 1.0	4.3	55.4	2.1	63.8	5.6	70.9	1.9	69.8
1.0 and under 1.5	10.6	66.0	12.8	76.6	4.5	75.4	10.1	79.9
1.5 and under 2.0	8.5	74.5	8.5	85.1	9.8	85.2	12.7	92.6
2.0 and under 3.0	10.6	85.1	4.3	89.4	8.9	94.1	.7	93.3
3.0 and under 5.0	6.4	91.5	8.5	97.9	3.7	97.8	6.2	99.5
5.0 and over	8.5	100.0	2.1	100.0	2.2	100.0	.5	100.0
Total	100.0		100.0		100.0		100.0	
Lay-offs: [2]								
Under 5	10.6	10.6	14.8	14.8	18.6	18.6	10.8	10.8
5 and under 10	19.1	29.7	17.0	31.8	36.3	54.9	42.1	52.9
10 and under 20	12.8	42.5	12.8	44.6	12.5	67.4	10.0	62.9
20 and under 30	8.5	51.0	21.3	65.9	9.9	77.3	25.6	88.5
30 and under 40	6.4	57.4	2.1	68.0	2.1	79.4	.3	88.8
40 and under 60	21.3	78.7	12.8	80.8	15.3	94.7	4.8	93.6
60 and under 90	12.8	91.5	6.4	87.2	2.0	96.7	1.7	95.3
90 and under 120	6.4	97.9	4.3	91.5	2.8	99.5	.9	96.2
120 and under 150	2.1	100.0	2.1	93.6	.5	100.0	1.4	97.6
150 and over	0		6.4	100.0	0		2.4	100.0
Total	100.0		100.0		100.0		100.0	
Total separations:								
Under 10	2.1	2.1	6.4	6.4	1.3	1.3	6.0	6.0
10 and under 20	21.3	23.4	21.3	27.7	49.4	50.7	43.2	49.2
20 and under 30	12.8	36.2	17.0	44.7	8.1	58.8	13.8	63.0
30 and under 40	8.5	44.7	19.1	63.8	9.3	68.1	24.8	87.8
40 and under 60	17.0	61.7	8.5	72.3	15.3	83.4	3.5	91.3
60 and under 90	23.4	85.1	12.8	85.1	12.5	95.9	3.9	95.2
90 and under 120	8.5	93.6	6.4	91.5	1.5	97.4	1.1	96.3
120 and under 150	4.3	97.9	0	0	2.0	99.4	0	0
150 and under 180	2.1	100.0	6.4	97.6	.6	100.0	2.7	99.0
180 and over			2.1	100.0			1.0	100.0
Total	100.0		100.0		100.0		100.0	
Accessions:								
Under 5	0	0	2.1	2.1	0	0	.2	.2
5 and under 10	2.1	2.1	2.1	4.2	1.4	1.4	.3	.5
10 and under 20	8.5	10.6	10.6	14.8	4.5	5.9	9.7	10.2
20 and under 30	17.0	27.6	10.6	25.4	46.2	52.1	24.6	34.8
30 and under 40	10.6	38.2	17.0	42.4	12.9	65.0	35.9	70.7
40 and under 50	6.4	44.6	8.5	50.9	3.0	68.0	10.0	80.7
50 and under 70	23.4	68.0	25.6	76.5	21.4	89.4	11.1	91.8
70 and under 110	21.3	89.3	14.9	91.4	7.0	96.4	5.3	97.1
110 and under 150	6.4	95.7	4.3	95.7	2.1	98.5	2.1	99.2
150 and over	4.3	100.0	4.3	100.0	1.5	100.0	.8	100.0
Total	100.0		100.0		100.0		100.0	

[1] The various turn-over rates represent the number of quits, discharges, lay-offs, total separations, and accessions per 100 employees.

[2] Including temporary, indeterminate, and permanent lay-offs.

TABLE 3.—*Distribution of Identical Plants in the Rubber Industry by Turn-Over Rates 1930 and 1940*—Continued

TIRES AND INNER TUBES (12 PLANTS)

Class and rate of turn-over	Establishments				Employees			
	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage
	1940		1939		1940		1939	
Quits:								
Under 2.5	8.3	8.3	0	0	1.0	1.0	0	0
2.5 and under 5.0	16.7	25.0	16.7	16.7	37.1	38.1	35.1	35.1
5.0 and under 7.5	33.3	58.3	33.3	50.0	42.0	80.1	39.4	74.5
7.5 and under 10	8.3	66.6	33.3	83.3	3.7	83.8	14.1	88.6
10 and under 15	16.7	83.3	16.7	100.0	10.7	94.5	11.4	100.0
15 and under 20	16.7	100.0	0	.....	5.5	100.0	0	.....
20 and under 25	0	.....	0	.....	0	.....	0	.....
25 and under 30	0	.....	0	.....	0	.....	0	.....
30 and under 35	0	.....	0	.....	0	.....	0	.....
35 and over	0	.....	0	.....	0	.....	0	.....
Total	100.0	.....	100.0	.....	100.0	.....	100.0	.....
Discharges:								
Under 0.2	8.3	8.3	8.3	8.3	1.0	1.0	1.2	1.2
0.2 and under 0.4	25.0	33.3	8.3	16.6	39.0	40.0	28.5	29.7
0.4 and under 0.5	16.7	50.0	25.1	41.7	37.1	77.1	38.5	68.2
0.5 and under 0.8	8.3	58.3	16.7	58.4	2.9	80.0	9.7	77.9
0.8 and under 1.0	8.3	66.6	8.3	66.7	3.9	83.9	3.7	81.6
1.0 and under 1.5	0	0	16.7	83.4	0	0	5.6	87.2
1.5 and under 2.0	0	0	8.3	91.7	0	0	7.7	94.9
2.0 and under 3.0	33.4	100.0	0	0	16.1	100.0	0	0
3.0 and under 5.0	0	.....	8.3	100.0	0	.....	5.1	100.0
5.0 and over	0	.....	0	.....	0	.....	0	.....
Total	100.0	.....	100.0	.....	100.0	.....	100.0	.....
Lay-offs [1]:								
Under 5	8.3	8.3	0	0	30.7	30.7	0	0
5 and under 10	16.7	25.0	25.0	25.0	34.5	65.2	62.2	62.2
10 and under 20	25.0	50.0	41.7	66.7	11.2	76.4	18.4	80.6
20 and under 30	8.3	58.3	25.0	91.7	3.9	80.3	17.8	98.4
30 and under 40	0	0	0	.....	0	0	0	.....
40 and under 60	41.7	100.0	8.3	100.0	19.7	100.0	1.6	100.0
60 and under 90	0	.....	0	.....	0	.....	0	.....
90 and under 120	0	.....	0	.....	0	.....	0	.....
120 and under 150	0	.....	0	.....	0	.....	0	.....
150 and over	0	.....	0	.....	0	.....	0	.....
Total	100.0	.....	100.0	.....	100.0	.....	100.0	.....
Total separations:								
Under 10	0	0	0	0	0	0	0	0
10 and under 20	25.0	25.0	25.0	25.0	65.2	65.2	61.0	61.0
20 and under 30	25.0	50.0	41.7	66.7	11.2	76.4	19.5	80.5
30 and under 40	8.3	58.3	25.0	91.7	3.9	80.3	17.9	98.4
40 and under 60	16.7	75.0	0	0	4.8	85.1	0	0
60 and under 90	25.0	100.0	8.3	100.0	14.9	100.0	1.6	100.0
90 and under 120	0	.....	0	.....	0	.....	0	.....
120 and under 150	0	.....	0	.....	0	.....	0	.....
150 and under 180	0	.....	0	.....	0	.....	0	.....
180 and over	0	.....	100.0	.....	100.0	.....	100.0	.....
Total	100.0	.....	.....	.....	.....	.....	.....	.....
Accessions:								
Under 5	0	0	0	0	0	0	0	0
5 and under 10	8.3	8.3	0	0	2.6	2.6	0	0
10 and under 20	16.7	25.0	16.7	16.7	7.5	10.1	5.2	5.2
20 and under 30	25.0	50.0	16.6	33.3	64.5	74.6	35.1	40.3
30 and under 40	0	0	25.0	58.3	0	0	34.8	75.1
40 and under 50	16.7	66.7	25.0	83.3	4.9	79.5	18.2	93.3
50 and under 70	25.0	91.7	16.7	100.0	18.9	98.4	6.7	100.0
70 and under 110	8.3	100.0	0	.....	1.6	100.0	0	.....
110 and under 150	0	.....	0	.....	0	.....	0	.....
150 and over	0	.....	0	.....	0	.....	0	.....
Total	100.0	.....	100.0	.....	100.0	.....	100.0	.....

[1] Including temporary, indeterminate, and permanent lay-offs.

TABLE 3.—*Distribution of Identical Plants in the Rubber Industry by Turn-Over Rates, 1939 and 1940*—Continued

RUBBER BOOTS AND SHOES (10 PLANTS)

Class and rate of turn-over	Establishments				Employees			
	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage
	1940		1939		1940		1939	
Quits:								
Under 2.5	20.0	20.0	20.0	20.0	10.1	10.1	10.4	10.4
2.5 and under 5.0	0	0	10.0	30.0	0	0	3.5	13.9
5.0 and under 7.5	10.0	30.0	10.0	40.0	3.5	13.6	3.3	17.2
7.5 and under 10.0	10.0	40.0	30.0	70.0	21.0	34.6	43.9	61.1
10.0 and under 15.0	20.0	60.0	20.0	90.0	22.9	57.5	32.0	93.1
15.0 and under 20.0	20.0	80.0	10.0	100.0	31.5	89.0	6.9	100.0
20.0 and under 25.0	10.0	90.0	0	.....	7.2	96.2	0	.....
25.0 and under 30.0	0	0	0	.....	0	0	0	.....
30.0 and under 35.0	0	0	0	.....	0	0	0	.....
35.0 and over	10.0	100.0	0	.....	3.8	100.0	0	.....
Total	100.0	.....	100.0	.....	100.0	.....	100.0	.....
Discharges:								
Under 0.2	10.0	10.0	20.0	20.0	6.3	6.3	9.7	9.7
0.2 and under 0.4	10.0	20.0	10.0	30.0	3.8	10.1	4.1	13.8
0.4 and under 0.5	0	0	10.0	40.0	0	0	3.5	17.3
0.5 and under 0.8	30.0	50.0	30.0	70.0	43.9	54.0	43.9	61.2
0.8 and under 1.0	0	0	0	0	0	0	0	0
1.0 and under 1.5	10.0	60.0	10.0	80.0	3.5	57.5	6.9	68.1
1.5 and under 2.0	20.0	80.0	20.0	100.0	31.5	89.0	31.9	100.0
2.0 and under 3.0	0	0	0	.....	0	0	0	.....
3.0 and under 5.0	10.0	90.0	0	.....	7.2	96.2	0	.....
5.0 and over	10.0	100.0	0	.....	3.8	100.0	0	.....
Total	100.0	.....	100.0	.....	100.0	.....	100.0	.....
Lay-offs: [1]								
Under 5	10.0	10.0	0	0	1.1	1.1	0	0
5 and under 10	30.0	40.0	30.0	30.0	32.0	33.1	32.7	32.7
10 and under 20	20.0	60.0	0	0	25.3	58.4	0	0
20 and under 30	20.0	80.0	30.0	60.0	30.3	88.7	51.3	84.0
30 and under 40	0	0	0	0	0	0	0	0
40 and under 60	20.0	100.0	20.0	80.0	11.3	100.0	10.9	94.9
60 and under 90	0	.....	10.0	90.0	0	.....	1.0	95.9
90 and under 120	0	.....	0	0	0	.....	0	0
120 and under 150	0	.....	0	0	0	.....	0	0
150 and over	0	.....	10.0	100.0	0	.....	4.1	100.0
Total	100.0	.....	100.0	.....	100.0	.....	100.0	.....
Total separations:								
Under 10	0	0	0	0	0	0	0	0
10 and under 20	20.0	20.0	20.0	20.0	22.1	22.1	25.8	25.8
20 and under 30	20.0	40.0	10.0	30.0	7.3	29.4	6.9	32.7
30 and under 40	20.0	60.0	30.0	60.0	29.1	58.5	51.2	83.9
40 and under 60	20.0	80.0	10.0	70.0	32.7	91.2	6.4	90.3
60 and under 90	20.0	100.0	10.0	80.0	8.8	100.0	4.6	94.9
90 and under 120	0	.....	10.0	90.0	0	.....	1.0	95.9
120 and under 150	0	.....	0	100.0	0	.....	0	0
150 and under 180	0	.....	0	.....	0	.....	0	0
180 and over	0	.....	10.0	.....	0	.....	4.1	100.0
Total	100.0	.....	100.0	.....	100.0	.....	100.0	.....
Accessions:								
Under 5	0	0	10.0	10.0	0	0	1.0	1.0
5 and under 10	0	0	0	0	0	0	0	0
10 and under 20	10.0	10.0	10.0	20.0	1.1	1.1	22.4	23.4
20 and under 30	10.0	20.0	10.0	30.0	21.0	22.1	3.5	26.9
30 and under 40	30.0	50.0	30.0	60.0	37.1	59.2	54.8	81.7
40 and under 50	0	0	0	0	0	0	0	0
50 and under 70	30.0	80.0	20.0	80.0	32.0	91.2	10.4	92.1
70 and under 110	10.0	90.0	20.0	100.0	5.0	96.2	7.9	100.0
110 and under 150	0	0	0	.....	0	0	0	.....
150 and over	10.0	100.0	0	.....	3.8	100.0	0	.....
Total	100.0	.....	100.0	.....	100.0	.....	100.0	.....

[1] Including temporary, indeterminate, and permanent lay-offs.

TABLE 3.—*Distribution of Identical Plants in the Rubber Industry by Turn-Over Rates, 1939 and 1940*—Continued

MISCELLANEOUS RUBBER PRODUCTS (25 PLANTS)

Class and rate of turn-over	Establishments				Employees			
	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage	Simple percentage	Cumulative percentage
	1940		1939		1940		1939	
Quits:								
Under 2.5	12.0	12.0	12.0	12.0	5.2	5.2	12.0	12.0
2.5 and under 5.0	8.0	20.0	16.0	16.0	4.0	9.2	10.4	10.4
5.0 and under 7.5	8.0	28.0	16.0	32.0	7.0	16.2	27.9	38.3
7.5 and under 10.0	8.0	36.0	4.0	36.0	22.7	38.9	14.6	52.9
10.0 and under 15.0	12.0	48.0	8.0	44.0	19.4	58.3	10.2	63.1
15.0 and under 20.0	20.0	68.0	20.0	64.0	21.3	79.6	11.4	74.5
20.0 and under 25.0	8.0	76.0	20.0	84.0	4.8	84.4	14.6	89.1
25.0 and under 30.0	8.0	84.0	8.0	92.0	3.4	87.8	8.9	98.0
30.0 and under 35.0	8.0	92.0	4.0	96.0	3.3	91.1	0.8	98.8
35.0 and over	8.0	100.0	4.0	100.0	8.9	100.0	1.2	100.0
Total	0		0		100.0		0	
	100.0		100.0				100.0	
Discharges:								
Under 0.2	24.0	24.0	32.0	32.0	10.3	10.3	14.0	14.0
0.2 and under 0.4	8.0	32.0	8.0	40.0	5.0	15.3	21.9	35.9
0.4 and under 0.5	0	0	0	0	0	0	0	0
0.5 and under 0.8	16.0	48.0	20.0	60.0	27.8	43.1	16.4	52.3
0.8 and under 1.0	4.0	52.0	0	0	15.0	58.1	0	0
1.0 and under 1.5	16.0	68.0	12.0	72.0	15.7	73.8	24.3	76.6
1.5 and under 2.0	8.0	76.0	4.0	76.0	9.9	83.7	2.4	79.0
2.0 and under 3.0	4.0	80.0	8.0	84.0	2.0	85.7	2.9	81.9
3.0 and under 5.0	12.0	92.0	12.0	96.0	11.4	97.1	15.7	97.6
5.0 and over	8.0	100.0	4.0	100.0	2.9	100.0	2.4	100.0
Total	100.0		100.0		100.0		100.0	
Lay-offs: [1]								
Under 5	12.0	12.0	28.0	28.0	9.0	9.0	48.0	48.0
5 and under 10	16.0	28.0	8.0	36.0	44.7	53.7	6.5	54.5
10 and under 20	4.0	32.0	4.0	40.0	2.2	55.9	2.2	56.7
20 and under 30	4.0	36.0	16.0	56.0	2.4	58.3	14.3	71.0
30 and under 40	16.0	52.0	4.0	60.0	15.5	73.8	1.2	72.2
40 and under 60	8.0	60.0	12.0	72.0	3.4	77.2	5.3	77.5
60 and under 90	24.0	84.0	8.0	80.0	8.6	85.8	6.5	84.0
90 and under 120	12.0	96.0	8.0	88.0	12.1	97.9	3.8	87.8
120 and under 150	4.0	100.0	4.0	92.0	2.1	100.0	6.3	94.1
150 and over	0		8.0	100.0	100.0		5.9	100.0
Total	100.0		100.0				100.0	
Total separations:								
Under 10	4.0	4.0	12.0	12.0	5.8	5.8	26.8	26.8
10 and under 20	20.0	24.0	20.0	32.0	41.5	47.3	21.5	48.3
20 and under 30	4.0	28.0	8.0	40.0	2.1	49.4	8.4	56.7
30 and under 40	4.0	32.0	12.0	52.0	1.2	50.6	10.3	67.0
40 and under 60	16.0	48.0	12.0	64.0	20.7	71.3	8.4	75.4
60 and under 90	24.0	72.0	16.0	80.0	10.8	82.1	8.6	84.0
90 and under 120	16.0	88.0	8.0	88.0	6.6	88.7	3.8	87.8
120 and under 150	8.0	96.0	0	0	8.7	97.4	0	0
150 and under 180	4.0	100.0	12.0	100.0	2.6	100.0	12.2	100.0
180 and over	0		0		0		0	
Total	100.0		100.0		100.0		100.0	
Accessions:								
Under 5	0	0	0	0	0	0	0	0
5 and under 10	0	0	0	0	4.0	4.0	1.2	1.2
10 and under 20	4.0	4.0	1.1	1.1	8.0	12.0	5.8	7.0
20 and under 30	16.0	20.0	31.2	32.3	8.0	20.0	24.5	31.5
30 and under 40	8.0	28.0	17.1	49.4	8.0	28.0	16.5	48.0
40 and under 50	4.0	32.0	2.0	51.4	4.0	32.0	2.4	50.4
50 and under 70	20.0	52.0	15.9	67.3	32.0	64.0	22.3	72.7
70 and under 110	32.0	84.0	21.0	88.3	20.0	84.0	14.7	87.4
110 and under 150	12.0	96.0	9.1	97.4	8.0	92.0	9.1	96.5
150 and over	4.0	100.0	2.6	100.0	8.0	100.0	3.5	100.0
Total	100.0		100.0		100.0		100.0	

[1] Including temporary, indeterminate, and permanent lay-offs.

Plants registering an accession rate of less than 30 per 100 workers showed a slight increase in 1940 compared with the preceding year, but the number of employees rose from 35 to 52 percent. In the rate groups of 70 or more the number of plants increased from 24 to 32 percent, and the number of employees increased from 8 to 11 percent.

Manufacture of tires and inner tubes.—In 1939, 17 percent of the firms with 35 percent of the employees and in 1940, 25 percent of the firms with 38 percent of the workers registered fewer than 5 quits per 100 workers. Plants with a quit rate of more than 10 per 100 employees increased from 17 to 33 percent, and the employees in these plants increased from 11 percent to 16 percent.

The distribution of plants having a discharge rate of less than 1 for every 100 employees remained at the same level in 1940 as in 1939, and only a slight change was indicated in the number of employees.

In 1939, two-thirds and in 1940, one-half of the plants reported a lay-off of fewer than 20 per 100 workers; during the same period their employees decreased from 81 to 76 percent.

More than 60 percent of the workers were employed in firms having a lay-off rate of less than 20 for every 100 workers in both years. The number of establishments in which total separations were 60 and fewer than 90 per 100 employees increased from 8 percent in 1939 to 25 percent in 1940. These plants employed only 2 percent of the total number of workers in 1939 and 15 percent in 1940.

In 1939, more than 40 accessions per 100 employees were reported in approximately 42 percent of the plants and in 1939, 50 percent. These establishments employed 25 percent of the total number of employees in both years. One-third of the plants in 1939 and one-half in 1940 reported fewer than 30 accessions for every 100 workers. The number of employees in these plants increased from 40 percent in 1939 to 65 percent in 1940.

Manufacture of rubber boots and shoes.—A substantial decrease was indicated in 1940 compared with 1939 in the number of plants with fewer than 10 quits for every 100 employees. In 1939, 70 percent, and in 1940, 40 percent of all plants were in this group, while the number of their employees declined from 61 to 35 percent. A notable increase was shown in the plants with more than 15 and fewer than 25 for every 100 workers; the plants increased from 10 percent to 30 percent and their employees from 7 percent to 39 percent.

Nearly three-fourths of the plants, employing 61 percent of the total number of workers, reported discharges at the rate of less than 1 per 100 in 1939; as compared with half of the establishments employing 54 percent of the total number of employees in 1940.

In 1939, 60 percent of the plants with 84 percent of the employees, and in 1940, 80 percent with 89 percent of the workers reported lay-off rates of less than 30 for every 100 employees. In the same period

the number of establishments with lay-off rates of 40 or more per 100 workers decreased from 40 to 20 percent.

In 1939, 84 percent, and in 1940, 59 percent of the employees were with plants reporting fewer than 40 separations per 100 workers. The percentage of the total number of firms in this group remained unchanged.

The number of firms with fewer than 30 accessions for every 100 workers decreased from 30 percent in 1939 to 20 percent of the total in 1940. Twenty-seven percent of the employees were employed in these plants in 1939 and 22 percent in 1940.

Manufacture of miscellaneous rubber products.—A tendency toward slightly higher quit rates was indicated by reports received from manufacturers of miscellaneous rubber products during 1939 and 1940. Establishments registering more than 20 quits per 100 employees increased from 16 percent of the total in 1939 to 24 percent in 1940, and the number of their employees increased from 11 to 16 percent. In the lower brackets the number of workers in plants reporting fewer than 5 quits for every 100 workers decreased from 38 to 16 percent.

In 1939, three-fifths of the plants with 52 percent of the workers had a discharge rate of less than 1 for every 100 workers. In 1940 slightly more than one-half of the plants and 58 percent of the employees were in the same group.

More than one-half of the total number of workers were employed in plants having a lay-off rate of fewer than 20 for every 100 employees in both years. The number of workers in plants with a lay-off rate of more than 60 per 100 workers remained virtually unchanged.

Plants having a total separation rate of fewer than 30 for every 100 workers decreased from 40 to 28 percent, and their employees declined from 57 to 49 percent.

A marked decrease was shown in the number of plants reporting accessions of fewer than 30 per 100 employees, i. e., from about one-third of the plants with 32 percent of the workers to one-fifth of the plants with 20 percent of the employees. In the higher brackets concerns having accessions of more than 50 per 100 workers increased from 49 percent of the total in 1939 to 68 percent in 1940, and workers employed in these plants increased from 50 to 68 percent.

Turn-Over Rates in Selected Plants

Turn-over rates in individual plants in the rubber industry followed an irregular pattern in 1939 and 1940. Certain firms that reported comparatively low total separation rates in 1939 had unusually high rates in 1940; others with high rates in 1939 showed sharp decreases in the following year. The same was true of accessions.

Since lay-offs constituted the largest part of all classes of separations in firms with high turn-over rates, it may be assumed that the principal cause for the large number of changes in personnel was a partial suspension of operations at various times, usually the result of lack of orders or material.

That all of the new workers hired were not satisfactory was indicated by the high discharge rates in some of the plants. In 1939 one plant reported an accession rate of 52.25 per 100 employees; of those hired more than 4 of every 100 were discharged. Another company with an accession rate of 96.66 in 1939 and 82.77 in 1940 reported discharges at the rate of 3.34 and 4.96 per 100 employees. As evidence that careful selection of new employees reduces the number of unnecessary hirings, some other plants with high accession rates reported very low discharge rates.

The ratio of quits to accessions is important. A high quit rate accompanied by a high rate for accessions indicates a favorable labor market; it may also signify that the workers are shifting from one plant to another in the same industry and in the same locality. The quit rates for the individual plants were, with a few exceptions, higher in 1940 than in 1939. Two plants, both in a highly industrialized area, reported outstanding increases in the quit rate in 1940 compared with 1939. In other plants the percentage of increase was not so great. There was a trend toward higher voluntary separation rates in the industry as a whole.

TABLE 4.—*Annual Labor Turn-Over Rates in 20 Selected Plants Manufacturing Rubber Products, 1939 and 1940* [1]

Plant	Separations								Accessions	
	Quits		Discharges		Lay-offs [2]		Total			
	1940	1939	1940	1939	1940	1939	1940	1939	1940	1939
Tires and inner tubes:										
Plant No. 1	6.09	2.88	0.33	0.36	18.73	18.75	25.15	21.99	50.36	24.69
Plant No. 2	9.92	9.19	2.02	1.23	5.21	9.76	17.15	20.18	13.79	12.96
Plant No. 3	5.85	6.37	.24	.46	15.89	12.98	21.98	19.81	9.80	30.13
Plant No. 4	10.26	9.91	2.07	4.25	46.98	13.90	59.31	28.06	18.03	52.25
Plant No. 5	7.07	5.58	.30	.22	4.46	6.50	11.83	12.30	24.21	31.73
Plant No. 6	5.97	8.56	.64	.38	17.91	25.29	24.52	34.23	22.17	32.98
Plant No. 7	3.25	5.17	.39	.68	56.90	28.42	60.54	34.27	56.61	44.61
Rubber boots and shoes:										
Plant No. 8	8.25	7.94	.69	.57	7.16	8.93	16.10	17.44	29.05	13.34
Plant No. 9	5.39	4.66	1.20	.39	15.57	7.18	22.16	12.23	32.73	21.17
Plant No. 10	12.54	7.71	.66	.46	18.95	22.53	32.15	30.70	67.92	32.23
Plant No. 11	21.36	19.67	2.97	1.37	5.65	7.73	29.98	28.77	39.75	34.44
Plant No. 12	15.92	11.60	1.85	1.47	24.49	22.23	42.26	35.30	37.95	34.42
Miscellaneous rubber products:										
Plant No. 13	10.80	8.71	1.94	1.31	6.05	1.53	18.79	11.55	23.94	14.16
Plant No. 14	42.83	9.33	.98	3.82	9.24	20.45	53.05	33.60	59.78	59.44
Plant No. 15	6.32	10.99	0	.52	75.86	67.54	82.18	79.05	67.82	97.91
Plant No. 16	21.93	17.55	4.96	3.34	49.35	24.79	76.24	45.68	82.77	96.66
Plant No. 17	40.24	13.99	1.18	0	22.49	11.89	63.91	25.88	93.49	54.55
Plant No. 18	16.90	17.91	1.18	.60	37.83	65.22	55.91	83.73	97.16	86.87
Plant No. 19	16.67	16.56	2.13	1.88	34.04	20.31	52.84	38.75	40.43	48.13
Plant No. 20	7.24	3.06	.61	.70	1.60	4.04	9.45	7.80	25.03	26.04

[1] The various turn-over rates represent the number of quits, discharges, lay-offs, total separations, and accessions per 100 employees.

[2] Including temporary, indeterminate, and permanent lay-offs.

Minimum Wages and Maximum Hours

WAGE ORDER FOR CARPET AND RUG INDUSTRY [1]

EMPLOYEES in the wool division of the carpet and rug industry are entitled to a 40-cent minimum hourly wage, and those engaged in other than the wool division are to be paid 35 cents hourly, according to an order issued by the Administrator of the Fair Labor Standards Act. These minimum rates came into effect on March 17, 1941. It is estimated that of the 31,000 workers employed in the industry, 1,100 were receiving less than the minimum wages established.

The 40-cent minimum applies to employees engaged in (*a*) the spinning, dyeing, finishing, or processing of carpet yarns which contain any carpet wool; or (*b*) the manufacturing, dyeing, finishing, or processing of rugs or carpets containing any wool of any kind, under the definition of the carpet and rug industry. Included in the other than wool division, for which the minimum hourly rate is 35 cents, are all employees excluded from the wool division.

As defined in the Administrator's order, the carpet and rug industry embraces: (*a*) The spinning, dyeing, finishing, or processing of carpet yarns which contain any carpet wool; and (*b*) the manufacturing, dyeing, finishing, or processing of rugs or carpets from any yarns or fibers or from grass or paper, but not including bath mats or the manufacture by hand of rugs or carpets.

WAGE DETERMINATION FOR DIE-CASTING MANUFACTURE [2]

THE minimum wage in the die-casting-manufacturing industry for employees engaged in the performance of Government contracts under the Walsh-Healey Act, was fixed by the Secretary of Labor at 50 cents an hour or $20 per week of 40 hours, arrived at on either a time- or piece-work basis. Effective on bids let on or after April 5, 1941, this wage applies in the industry which manufactures die castings for sale, and does not include the manufacture of die castings when

[1] U. S. Department of Labor. Wage and Hour Division. Press releases Nos. 1285 and 1294, dated February 20, and March 17, 1941.

[2] Idem, Division of Public Contracts. Press release No. 1819.

incorporated into another product by the manufacturer of such other products. The term die casting as used in the determination describes a casting made by forcing molten metal under pressure into a metallic mold or die.

Apprentices may be employed at lower rates of pay, if their employment conforms to the standards of the Federal Committee on Apprenticeship. Learners may be employed at the rate of 40 cents an hour or $16 per week of 40 hours, for not to exceed 60 days, if the total number of employees so classified does not exceed 5 percent of the total number of employees in any one establishment.

EXTENSION OF DETERMINATIONS FOR COTTON-GARMENT AND RAINCOAT INDUSTRIES [1]

THE determinations of the Secretary of Labor covering the cotton-garment and men's raincoat industries were extended to cover wages in additional manufacturing processes on February 8, 1941. The extended coverage became effective on all bids solicited on or after March 6, 1941, under the Walsh-Healey law.

The determination for the cotton-garment and allied industries was amended to include the manufacture and supply of ammunition and cartridge belts made of textiles; canvas leggings; cot covers; fabric pouches and carriers for first-aid equipment, such as kit cantle ring straps, kit inserts, kit laces, kit couches, and kit suspenders; mattress covers; mosquito bars; and wardrobe bags with strings, made of textiles. The minimum hourly wage to be paid was fixed at 37.5 cents an hour or $15 for a week of 40 hours, arrived at either on a time- or piece-work basis. Learners and handicapped and superannuated workers may be employed in accordance with the provisions of the determination previously made for the industry.[2]

Coverage of the men's raincoat determination was extended to employees engaged in the manufacture of oiled, waterproof cotton outer garments and all other types of rain wear not previously covered. For this industry the minimum prevailing wage is 40 cents an hour or $16 a week of 40 hours, arrived at either on a time- or piece-work basis.[2] Learners and handicapped and superannuated workers may be employed in accordance with the provisions of the determination previously made for the industry.

[1] U. S. Department of Labor. Division of Public Contracts. Press releases Nos. 1780 and 1781.

[2] For terms of the determination, see Monthly Labor Review, issue of October 1940: Four Years of Public Contracts Act.

ACTIVITIES OF WAGE AND HOUR DIVISION, 1939–40[1]

STRESS is placed on the need for good labor relations to facilitate the defense effort, in the second annual report of the Administrator of the Fair Labor Standards Act. This report, covering the fiscal year ending June 30, 1940, draws on the experience in the United States and other belligerent countries in the war period of 1914–18, to point out eventualities that should be guarded against, and also shows how certain of the warring countries have been handling labor problems in the recent period of their war preparation and activity. The Administrator pointed out that employment indexes would soon reach new peaks under the stimulus of the defense program and of the 40-hour week established by the terms of the wage and hour law which his division enforces.

Employers, the report states, are hastening to comply with the terms of the law. Realization is spreading that time and one-half the regular hourly rate of pay for work in excess of 40 hours weekly must be paid to maintenance workers and office workers in most commercial establishments, as well as to production workers in factories.

At the close of the year 1940, wage restitutions had been made to 200,000 employees, amounting to more than $5,000,000. Payment of over $1,000,000 more had been arranged. Six months earlier (i. e., on June 30, 1940) the total in restitutions had amounted to $2,161,707. Thus, enforcement of the law gained considerable impetus in the second half of the year. The total number of inspections was 28,795 in the calendar year 1940, of which 24,691 (or nearly 87 percent) were made from July to December, inclusive.

Pay rolls in low-wage industries have been increased by more than $100,000,000 annually, as a result of operations under the wage and hour law. In addition to establishment of the general 30-cent minimum wage, 16 wage orders have been promulgated fixing wages between 32½ and 40 cents an hour. The 16 industries covered employ 3,185,000 workers, of whom 601,600 were previously being paid at lower rates than the rates established for their industries; consequently, these persons received wage increases.

No specific recommendations are offered by the Administrator for further wage and hour legislation. The report states that many fundamental changes in the regulations have been provided. Pending further experience in administration and further study of the law's effects, it is not possible to foretell whether amendments will be necessary.

Conditions have undergone significant change in the period covered by the report. Business improved considerably in the first half of

[1] Data are from U. S. Department of Labor, Wage and Hour Division, Annual Report for Fiscal Year Ended June 30, 1940, Washington, 1941; and press release No. 1273.

1940, and many unemployed workers were called back to jobs. The act has not adversely affected agriculture, in the opinion of the Administrator. It has not resulted in a general rise in the price level to the disadvantage of farmers, and farmers' and city workers' incomes are interdependent. Insofar as the Fair Labor Standards Act helps to maintain employment and pay rolls, it provides a support for consumer demand for food and other farm products. The law has also aided farm families directly, since their members work in a great many rural factories and in other nonfarming occupations, which are subject to the labor provisions.

WAGE ORDER FOR GLOVE INDUSTRY IN PUERTO RICO

UNDER an amendment to the Fair Labor Standards Act, which allowed an exception to the statutory minimum of 30 cents per hour for workers in Puerto Rico, the Administrator of the Wage and Hour Division was empowered to fix piece rates which are computed to yield the minimum hourly rates fixed for the different industries.

Recommendations of a special industry committee, for minimum-wage rates in the woven or knitted fabric glove and the leather glove divisions of the needlework industries in Puerto Rico, were approved by the Administrator to be effective February 19, 1941.[1] Wage rates in other divisions of the needlework industry were made effective December 2, 1940.[2]

In the woven or knitted glove division the minimum rate for hand sewing, including (but not by way of limitation) hand drawing, hand rolling, and embroidering and embellishing by hand, is 15 cents an hour, and for the same operations in the leather glove division, 18 cents an hour. For other operations, including (but not by way of limitation) cutting, machine operating, stamping, sorting, washing, finishing, pressing, examining, and packing the minimum rate for both fabric and leather gloves is 20 cents an hour.

An order issued February 15, 1941, effective February 19, 1941, fixed the piece rates for hand-sewing operations for both fabric and leather gloves which will yield at least the above hourly rates.

[1] U. S. Department of Labor. Wage and Hour Division. Press release, January 18, 1941.
[2] See Monthly Labor Review, December 1940, p. 1333.

MINIMUM-WAGE RATES IN MEXICO, 1940 AND 1941 [1]

MINIMUM-WAGE rates in Mexico, fixed by special commissions in the various municipalities, for the years 1940 and 1941, and approved by the Central Boards of Conciliation and Arbitration in the early part of 1940, vary from 0.75 peso [2] per day in Chiapas to 5 pesos in the northern district of Lower California. For 1938 and 1939, the lowest rate had been 0.75 peso in Jalisco and the highest 4.50 pesos in the northern district of Lower California; for 1936 and 1937, the lowest was 0.75 peso in 5 States, and the highest 4.50 pesos in the northern district of Lower California. In 1940 and 1941, only one wage was established for all types of work, in the State of Jalisco and in the Territory of Quintana Roo, although this wage varied from one municipality to another in Jalisco. In three municipalities of Colima the minimum wage in the salt works consisted of a specified amount of money and a share in the salt. In all the municipalities of Tlaxcala, the minimum-wage rates fixed for 1940 and 1941 were to be augmented by 16⅔ percent; in 1938 and 1939, the minimum wage in 13 municipalities of this State consisted of a specified amount of money and a specified quantity of maize. The minimum wage fixed for field workers in the Federal District, for 1940 and 1941, is applicable to persons to whom the employer furnishes dwelling, a truck patch, firewood, and similar payments in kind which reduce their cost of living. The greatest number of minimum-wage rates fixed according to type of work for 1940 and 1941 was 11 in Oaxaca, as compared with 9 in Sinaloa for 1938 and 1939, and 11 in Sinaloa and the southern district of Lower California for 1936 and 1937.

The accompanying table shows for the various geographical divisions of Mexico the number of types of work for which wages were fixed for 1940 and 1941, with the lowest and highest minimum-wage rates for each division.

These rates represent an increase over those for 1938 and 1939 in the lowest minimum wage in 9 governmental divisions, varying from 10 centavos in San Luis Potosí, Tamaulipas, and Veracruz to 1 peso in the northern district of Lower California; and an increase in the highest rate in 14 divisions, varying from 15 centavos in Jalisco and Tamaulipas to 1 peso in Campeche. Decreases shown in the lowest wages were 5 centavos in Chiapas and Tlaxcala (in the latter instance not a real decrease, because of the supplement of 16⅔ percent established for all rates) and 25 centavos in México and Yucatán; in the highest rate, a decrease of 75 centavos is shown in México. Both

[1] Data are from Revista del Trabajo, (Departamento Federal del Trabajo, Mexico, D. F.), April, May, and June 1940. For background and analysis of rates for 1938 and 1939, see Bureau of Labor Statistics, Serial No. R. 897: Wages in Mexico, 1927 and 1938; for description of the Mexican plan for fixing minimum wages, and the rates for 1936 and 1937, see Bulletin of the Pan American Union (Washington), July 1938.

[2] Average exchange rate of peso (100 centavos) in 1940=18.5 cents.

lowest and highest minimum-wage rates remained at the same level in 14 governmental divisions for 1940 and 1941 as for 1938 and 1939; in addition to these, the lowest rates remained the same in the southern district of Lower California, Durango, Ganajuato, Michoacán, Oaxaca, and Zacatecas, and the highest rates remained the same in Chiapas, Sinaloa, and Yucatán. In a total of 10 governmental divisions, some change was shown in both the lowest and the highest rates.

Minimum Daily Wage Rates Fixed in Mexico for 1938 and 1939, and for 1940 and 1941

[Average exchange rate of peso: 1938, 22.1 cents; 1939, 19.3 cents; 1940, 18.5 cents]

Geographical division	1938–39			1940–41		
	Number of types of work for which rates were fixed	Minimum wage		Number of types of work for which rates were fixed	Minimum wage	
		Lowest	Highest		Lowest	Highest
Aguascalientes	7	1.15	1.75	5	1.50	2.00
Baja California, D. N.	2	3.00	4.50	2	4.00	5.00
Baja California, D. S.	8	1.50	2.50	8	1.50	3.20
Campeche	1	1.50	2.00	3	2.00	3.00
Chiapas	4	.80	2.50	4	.75	2.50
Chihuahua	3	1.50	3.50	3	1.50	3.50
Coahuila	3	1.20	2.50	2	1.20	2.50
Colima	3	1.15	2.00	[1] 3	1.15	2.00
Durango	4	1.00	2.50	4	1.00	3.00
Federal District	2	1.65	2.50	[2] 2	1.65	2.50
Guanajuato	4	1.00	1.85	4	1.00	1.85
Guerrero	3	1.00	2.00	3	1.00	2.00
Hidelgo	3	1.00	2.25	3	1.00	2.25
Jalisco	1	.75	1.70	[3] 1	1.00	1.85
México	2	1.25	2.50	4	1.00	1.75
Michoacán	1	1.00	1.00	3	1.00	1.25
Morelos	2	1.00	2.00	3	1.00	2.00
Nayarit	5	1.10	2.00	6	1.10	2.00
Nuevo León	2	1.00	2.50	2	1.00	2.50
Oaxaca	8	1.00	2.00	11	1.00	2.50
Puebla	2	1.30	2.10	2	1.30	2.10
Querétaro	4	1.00	1.50	4	1.00	1.50
Quintana Roo	1	3.00	3.00	1	3.00	3.00
San Luis Potosí	5	1.00	2.00	4	1.10	2.25
Sinaloa	9	1.00	3.00	8	1.25	3.00
Sonora	3	1.00	3.25	3	1.50	4.00
Tabasco	2	1.50	2.50	2	1.50	2.50
Tamaulipas	3	1.00	3.60	3	1.10	3.75
Tlaxcala	[4] 3	.90	1.25	[5] 7	.85	2.00
Veracruz	3	1.55	2.85	3	1.65	3.55
Yucatán	1	1.75	3.50	3	1.50	3.50
Zacatecas	2	1.00	1.75	3	1.00	2.00

[1] For laborers in the salt works in 3 municipalities, a share of the salt is added.
[2] The minimum wage fixed for field workers in the Federal District is applicable to persons to whom the employer furnishes certain payments in kind.
[3] Incomplete; lacking reports from 2 municipalities.
[4] In 13 municipalities a specified amount of maize is added.
[5] All rates given are to be increased by 16⅔ percent.

In 29 of the 32 geographical divisions of Mexico, special minimum wages were fixed for field work, ranging from 75 centavos in Chiapas to 3 pesos in Sonora and 4.50 pesos in the northern district of Lower California. In 23 geographical divisions, special wage rates were designated for city workers as such, ranging from 1 peso in Chiapas and Tlaxcala (but subject, in the latter State, to supplement of 16⅔ percent) to 4 pesos in Sonora and 5 pesos in the northern district of

Lower California. In 8 divisions, separate wages were established in mining, varying from 1.25 pesos in Querétaro to 3.20 pesos for workers inside the mine in the southern district of Lower California. Workers designated as unskilled or unclassified in 4 States were assigned wages ranging from 1 peso in Morelos to 1.75 pesos, also in Morelos, and skilled or classified workers from 1.20 pesos in Guanajuato to 2 pesos in Aguascalientes and Morelos. Four States fixed rates of 1.25 to 3.55 pesos for industry; 2 States, 1.25 to 2.70 pesos for commerce; and 2 States (Nayarit and Sinaloa), 1.75 and 2 pesos, respectively, for fishing. In the southern district of Lower California, the minimum wages fixed for seamen amounted to 2 pesos and for laborers in salt works, 2.75 pesos; other special rates were set for specified groups of workers. In Oaxaca the rate for servants in public and commercial establishments was 1.75 pesos, and other special groups, as sugarcane and banana workers, were protected by special rates. In addition to the southern district of Lower California and Oaxaca, special rates other than those indicated above were fixed for certain industrial or agricultural groups in Chiapas, Colima, Durango, Sinaloa, and Tlaxcala.

National Income

MONTHLY INCOME PAYMENTS IN THE UNITED STATES, 1929 TO 1940

THE national income has been defined as a measure of the net value of the Nation's economic output; but it may also be viewed in the light of its function of affording purchasing power and command of goods and services. The increased interest in recent years in business fluctuations has led to emphasis on the second or functional aspect of the national income, for it has been recognized that the volume of production and employment is significantly dependent on the ability of consumers to buy the currently produced new goods and services. This increasing emphasis on the national income as a process or as a flow of means of payment gives special interest to the recently revised monthly series of income payments for the period from 1929 to 1940.[1]

The monthly flow of income payments has been broken down into five main classifications, as follows: Salaries and wages; special payments, such as social-security benefits; direct and other relief; dividends and interest; and entrepreneurial income, which is combined with net rents and royalties. (See table 1.)

Salaries and wages combined formed a comparatively stable part of the flow of income payments during most of the years from 1929 to 1940 (table 2). Changes in wages are much more extreme than in salaries, but it is not possible to separate the two in many important branches of employment, especially during the earlier years of the period covered. Wages and salaries combined formed 63.7 percent of aggregate income payments in 1929, fell to 61.1 percent in 1936, and rose to 63.3 percent in 1940. If the items described as "social-security benefits and other labor income" are combined with wages and salaries, the trend is somewhat different, and the year 1940 marks a slight increase over 1929 in the proportion of income going to labor.

[1] U. S. Bureau of Foreign and Domestic Commerce. Monthly Income Payments in the United States, 1929–40, by Frederick M. Cone. The series of monthly income payments is published currently in the Survey of Current Business. The present series is not identical with similar data published earlier, a number of revisions having been made.

TABLE 1.—*Income Payments in the United States, by Types of Payment and by Months, 1929 to 1940* [1]

[Millions of dollars]

Year and month	Total income payments [2]	Salaries and wages [3]	Social-security benefits and other labor income [4]	Direct and other relief [4]	Dividends and interest	Entrepreneurial income and net rents and royalties	Total nonagricultural income payments
1929	82,064	52,299	935	60	11,851	16,919	73,817
January	6,937	4,146	77	5	1,347	1,362	6,320
February	6,342	4,176	76	5	795	1,290	5,807
March	6,553	4,276	77	5	898	1,297	6,000
April	6,759	4,341	77	5	1,038	1,298	6,189
May	6,681	4,426	78	5	857	1,315	6,076
June	6,891	4,453	78	4	1,007	1,349	6,236
July	7,180	4,355	78	5	1,306	1,436	6,443
August	6,739	4,396	78	5	738	1,522	5,939
September	6,988	4,494	78	5	856	1,555	6,156
October	7,400	4,561	80	5	1,084	1,670	6,432
November	6,810	4,371	79	5	904	1,451	6,078
December	6,784	4,304	79	6	1,021	1,374	6,141
1930	74,524	47,426	989	94	11,715	14,300	68,188
January	6,999	4,087	80	7	1,536	1,289	6,456
February	6,211	4,060	79	7	851	1,214	5,730
March	6,296	4,082	81	8	937	1,188	5,823
April	6,416	4,099	81	8	1,034	1,194	5,915
May	6,309	4,124	81	7	889	1,208	5,767
June	6,418	4,102	75	6	1,043	1,192	5,872
July	6,408	3,888	87	7	1,242	1,184	5,857
August	5,828	3,811	83	7	742	1,185	5,277
September	5,975	3,886	83	7	772	1,227	5,377
October	6,178	3,893	85	9	968	1,223	5,568
November	5,766	3,734	86	9	803	1,134	5,253
December	5,720	3,660	88	12	898	1,062	5,293
1931	63,452	39,865	1,991	158	10,270	11,168	59,324
January	5,873	3,480	88	14	1,283	1,008	5,507
February	5,271	3,472	92	14	733	960	4,952
March	5,673	3,506	395	14	793	965	5,332
April	5,813	3,494	442	13	909	955	5,471
May	5,389	3,486	182	12	754	955	5,030
June	5,431	3,443	124	11	914	939	5,073
July	5,436	3,272	121	11	1,087	945	5,062
August	4,897	3,190	110	12	680	905	4,564
September	4,935	3,211	107	12	706	899	4,597
October	5,133	3,202	110	13	886	922	4,755
November	4,819	3,090	106	14	724	885	4,476
December	4,782	3,019	114	18	801	830	4,505
1932	49,319	31,030	1,248	326	8,393	8,322	46,518
January	4,865	2,868	110	17	1,084	786	4,620
February	4,297	2,818	103	21	602	753	4,076
March	4,295	2,792	102	25	646	730	4,080
April	4,307	2,716	102	24	765	700	4,095
May	4,132	2,677	101	25	643	686	3,907
June	4,162	2,591	97	26	790	658	3,947
July	4,070	2,392	115	23	888	652	3,844
August	3,693	2,356	119	26	531	661	3,462
September	3,828	2,457	103	27	555	686	3,567
October	4,048	2,517	100	30	706	695	3,771
November	3,804	2,443	98	37	553	673	3,547
December	3,818	2,403	98	45	630	642	3,602

[1] U. S. Bureau of Foreign and Domestic Commerce. Monthly Income Payments in the United States, 1929–40, by Frederick M. Cone. The figures for 1940 are revised and extended to the end of the year from the records of the U. S. Bureau of Foreign and Domestic Commerce.

[2] The concept of income payments here adopted, which is concerned essentially with the flow of funds from industry and Government to the consumer, differs somewhat from the concept of "income paid out" in earlier income studies.

[3] Contributions to social-security funds are not included.

[4] Relief payments have been shared by farmers, independent professional classes, and businessmen, as well as employed workers; and the items described as "social-security benefits and other labor income" are not wholly labor income. It should be noted also that social-security benefits are, in part, payments of wages previously deducted for transfer to social-security funds.

TABLE 1.—*Income Payments in the United States, by Types of Payment and by Months, 1929 to 1940*—Continued

Year and month	Total income payments	Salaries and wages	Social-security benefits and other labor income	Direct and other relief	Dividends and interest	Entrepreneurial income and net rents and royalties	Total nonagricultural income payments
1933	46,830	29,124	1,042	580	7,351	8,733	43,032
January	4,044	2,319	98	48	938	641	3,839
February	3,535	2,285	96	50	501	603	3,357
March	3,513	2,230	97	57	527	602	3,319
April	3,611	2,240	95	52	613	611	3,395
May	3,656	2,310	93	49	532	672	3,373
June	3,885	2,386	109	47	625	718	3,556
July	4,016	2,336	77	42	798	763	3,643
August	3,759	2,434	77	42	452	754	3,414
September	4,036	2,565	77	41	483	870	3,578
October	4,385	2,645	75	44	723	898	3,897
November	4,096	2,623	74	53	516	830	3,691
December	4,294	2,751	74	55	643	771	3,970
1934	54,006	33,710	961	828	7,937	10,570	48,983
January	4,685	2,752	74	56	1,003	800	4,338
February	4,199	2,760	72	58	547	762	3,895
March	4,274	2,816	75	69	547	767	3,972
April	4,382	2,781	76	69	705	751	4,084
May	4,244	2,844	85	68	451	796	3,904
June	4,471	2,849	82	64	639	837	4,084
July	4,627	2,735	82	62	857	891	4,189
August	4,361	2,750	82	68	494	967	3,862
September	4,585	2,781	82	67	629	1,026	4,020
October	4,963	2,886	84	76	825	1,092	4,332
November	4,475	2,866	84	81	463	981	3,970
December	4,740	2,890	83	90	777	900	4,333
1935	58,809	36,649	1,040	1,099	8,055	11,966	52,914
January	4,824	2,889	83	98	879	875	4,455
February	4,495	2,928	84	94	520	869	4,137
March	4,676	2,977	85	102	623	889	4,294
April	4,929	3,013	86	102	810	918	4,514
May	4,615	3,031	86	97	476	925	4,184
June	4,821	3,044	87	89	674	927	4,381
July	4,774	2,936	87	88	717	946	4,318
August	4,705	2,981	86	91	501	1,046	4,159
September	5,127	3,117	90	89	706	1,125	4,509
October	5,459	3,221	89	94	832	1,223	4,745
November	5,014	3,208	89	84	482	1,151	4,381
December	5,370	3,304	88	71	835	1,072	4,837
1936	67,846	41,449	2,472	672	9,721	13,532	61,195
January	5,226	3,229	88	62	876	971	4,813
February	4,902	3,254	88	62	568	930	4,532
March	5,188	3,327	88	61	733	979	4,772
April	5,335	3,370	87	56	812	1,010	4,884
May	5,140	3,430	87	51	523	1,049	4,646
June	6,306	3,462	887	50	799	1,108	5,763
July	5,965	3,371	500	49	875	1,170	5,357
August	5,270	3,407	164	50	472	1,177	4,665
September	5,842	3,531	135	53	852	1,271	5,148
October	6,092	3,665	122	55	895	1,355	5,320
November	5,625	3,670	112	58	507	1,278	4,946
December	6,955	3,733	114	65	1,809	1,234	6,349
1937	71,783	45,297	1,216	837	9,794	14,639	64,609
January	5,810	3,578	104	71	901	1,156	5,281
February	5,417	3,647	100	72	488	1,110	4,938
March	5,944	3,764	101	75	788	1,216	5,363
April	6,015	3,822	98	71	866	1,158	5,488
May	5,699	3,884	95	66	504	1,150	5,174
June	6,274	3,900	106	63	1,015	1,190	5,703
July	6,133	3,772	103	63	932	1,263	5,487
August	5,863	3,800	101	65	622	1,275	5,216
September	6,127	3,849	102	67	785	1,324	5,422
October	6,291	3,904	102	68	852	1,365	5,535
November	5,657	3,737	101	73	480	1,266	5,000
December	6,553	3,640	103	83	1,561	1,166	6,002

TABLE 1.—*Income Payments in the United States, by Types of Payment and by Months, 1929 to 1940*—Continued

Year and month	Total income payments	Salaries and wages	Social-security benefits and other labor income	Direct and other relief	Dividends and interest	Entrepreneurial income and net rents and royalties	Total nonagricultural income payments
1938	66,242	42,008	1,633	1,008	8,258	13,335	60,166
January	5,602	3,420	103	89	878	1,112	5,106
February	5,104	3,407	120	90	456	1,031	4,683
March	5,348	3,440	146	91	600	1,071	4,888
April	5,478	3,446	139	85	760	1,048	5,029
May	5,168	3,444	140	81	458	1,045	4,710
June	5,543	3,443	146	80	814	1,060	5,069
July	5,475	3,340	143	80	814	1,098	4,956
August	5,183	3,418	152	80	434	1,099	4,683
September	5,674	3,570	145	80	712	1,167	5,109
October	5,952	3,684	139	80	760	1,289	5,267
November	5,554	3,677	131	83	473	1,190	4,987
December	6,161	3,719	129	89	1,099	1,125	5,679
1939	70,096	44,412	1,686	1,067	8,983	13,948	63,721
January	5,720	3,585	132	92	810	1,101	5,243
February	5,298	3,589	137	94	425	1,053	4,888
March	5,771	3,644	153	95	762	1,117	5,295
April	5,674	3,611	137	90	750	1,086	5,214
May	5,449	3,655	143	87	462	1,102	4,962
June	5,956	3,723	149	85	915	1,084	5,485
July	5,736	3,565	141	85	839	1,106	5,239
August	5,439	3,604	150	87	443	1,155	4,908
September	6,025	3,738	140	87	799	1,261	5,386
October	6,259	3,911	133	88	775	1,352	5,541
November	5,865	3,879	134	88	486	1,278	5,239
December	6,904	3,908	137	89	1,517	1,253	6,321
1940	74,294	47,058	1,853	1,067	9,623	14,693	67,555
January	6,093	3,767	148	95	840	1,243	5,533
February	5,604	3,742	151	95	447	1,169	5,108
March	5,987	3,784	155	94	820	1,134	5,519
April	5,965	3,784	152	92	799	1,138	5,479
May	5,689	3,838	166	89	472	1,124	5,211
June	6,288	3,871	166	86	1,050	1,115	5,821
July	6.103	3,766	167	87	901	1,182	5,562
August	5,791	3,841	164	87	485	1,214	5,232
September	6,467	4,030	150	84	897	1,306	5,818
October	6,681	4,178	145	86	845	1,427	5,909
November	6,240	4,169	144	86	494	1,347	5,570
December	7,386	4,288	145	86	1,573	1,294	6,793

TABLE 2.—*Types of Income Payments as Percentages of Total Income Payments, 1929 to 1940* [1]

Year	Percent of total income payments						
	Total income payments	Salaries and wages [2]	Social security benefits and other labor income [3]	Direct and other relief [3]	Dividends and interest	Entrepreneurial income and net rents and royalties	Total nonagricultural income payments
1929	100.0	63.7	1.1	0.1	14.4	20.6	90.0
1930	100.0	63.6	1.3	.1	15.7	19.2	91.5
1931	100.0	62.8	3.1	.2	16.2	17.6	93.5
1932	100.0	62.9	2.5	.7	17.0	16.9	94.3
1933	100.0	62.2	2.2	1.2	15.7	18.6	91.9
1934	100.0	62.4	1.8	1.5	14.7	19.6	90.7
1935	100.0	62.3	1.8	1.9	13.7	20.3	90.0
1936	100.0	61.1	3.6	1.0	14.3	19.9	90.2
1937	100.0	63.1	1.7	1.2	13.6	20.4	90.0
1938	100.0	63.4	2.5	1.5	12.5	20.1	90.8
1939	100.0	63.4	2.4	1.5	12.8	19.9	90.9
1940	100.0	63.3	2.5	1.4	13.0	19.8	90.9

[1] Calculated from data in table 1.
[2] Contributions to social-security funds are not included.
[3] Not wholly to be classed as labor income, but no satisfactory break-down is practicable.

The fluctuations in the amount of "social-security benefits and other labor income" were caused in part by the fact that the item thus described includes Federal payments to veterans in the form of the so-called soldiers' bonus. The main cause of the increase in the payments, however, over the period as a whole, was the expansion of the social-security program to include unemployment compensation and old-age insurance benefits, to which workers themselves contribute by deductions from their wages or salaries.

The proportion of "social-security benefits and other labor income" that went to persons ordinarily dependent on wages or salaries was probably greater than the proportion of payments described as "direct and other relief" that went to these groups. Expenditures by governmental agencies for relief included, especially in depression years, considerable sums paid to farmers and certain classes of businessmen and to persons ordinarily belonging to the independent professions. Salaries and wages include, as one of the items, "work relief wages," and a part of these payments went to persons other than those normally dependent upon wages and salaries.

The proportion of the flow of income that went to dividends and interest was somewhat stabilized by the fact that interest payments were comparatively well maintained during depression years, when dividend payments declined sharply. Nonagricultural income as a whole remained, through most of the period, a remarkably constant proportion of total income payments, the proportion ranging (except for the years 1930 to 1933) from 90.0 to 90.9 percent.

TABLE 3.—*Salaries and Wages by Main Types of Enterprise, 1929–40* [1]

[Millions of dollars]

Year	Salaries and wages					
	Total	Commodity-producing industries	Distributive industries	Service industries	Government	Work-relief wages
1929	52,299	21,717	13,902	11,780	4,900	----------
1930	47,426	18,434	12,860	11,105	5,023	4
1931	39,865	14,059	11,070	9,670	5,007	59
1932	31,030	9,549	8,556	7,943	4,850	132
1933	29,124	9,234	7,762	7,144	4,328	656
1934	33,710	11,459	8,546	7,827	4,491	1,387
1935	36,649	12,923	9,154	8,361	4,909	1,302
1936	41,449	14,993	9,986	9,131	5,329	2,010
1937	45,297	17,383	10,867	9,953	5,558	1,536
1938	42,008	14,377	10,224	9,528	5,865	2,014
1939	44,412	15,980	10,611	9,897	6,111	1,813
1940	47,058	17,520	11,112	10,346	6,549	1,531

[1] U. S. Bureau of Foreign and Domestic Commerce. Monthly Income Payments in the United States, 1929–40 (pp. 22–26). The figures for 1940 are revised and extended to the end of the year from the records of the U. S. Bureau of Foreign and Domestic Commerce. Contributions to social-security funds are not included.

Wages and salaries are grouped under four main types of enterprise, namely, commodity-producing industries, distributive industries,

service industries, and Government. Compensation for relief work is separately classified. Annual figures for these classifications of salaries and wages are given in table 3.[2]

The most extreme of the fluctuations in wage and salary payments between 1929 and 1940 were in the commodity-producing industries. This is accounted for largely by the comparative variability of capital-goods and durable-goods industries. Wage and salary payments in the commodity-producing industries and also in the distributive industries in 1940 were about four-fifths of the 1929 figure. In private service industries, these payments were a much larger proportion (88 percent) of the 1929 payments. In Government services, there was a significant increase over 1929.

The two concepts of income previously mentioned, namely, the net value of the Nation's economic output, and the command over that output as measured by effective demand or purchasing power, are embodied in the data of table 4. This table gives estimates of the national income by years from 1929 to 1939, the figures including business savings. When business savings, either positive or negative, are subtracted from the national income, the "distributive shares" remain; but in estimating income payments, certain deductions are made from the "distributive shares." These deductions include, for example, the social-security contributions, because these do not enter immediately into the flow of income to consumers. To the "distributive shares" certain additions are made, however, as for example, social-security benefits and direct relief, because these payments, from whatever sources, enter the flow of income currently available to consumers.

The study of monthly income payments here summarized discusses in some detail the interpretation and uses of the data and also the limitations imposed by certain deficiencies in the available sources of information. The monthly series is primarily a measure of changes in the extent and distribution of means of payment or of the purchasing power of consumers. It is held, also, that the series affords "the most comprehensive measure of general economic activity now available."

The proper use of the data requires consideration of price changes, but there is no single index, either of prices or of cost of living, that makes possible an adequate adjustment of the aggregates for measuring either the changes in purchasing power or the fluctuations in economic activity. When the major item, namely, the sum of salaries and wages and social-security benefits, is adjusted by the Bureau of Labor Statistics' index of cost of living, this adjusted aggregate indicates that employee groups could buy about 12.5 percent more goods and services in 1940 than in 1929. The December 1940 aggregate of wages and salaries and social-security benefits adjusted to cost of

[2] Monthly figures are given in the source here used (see footnote 1, p. 974).

living indicates a rise in purchasing power of about 21.5 percent over the 1929 average—an increase substantially larger than the growth of employee groups, indicating a rise in per capita real income.

TABLE 4.—*National Income and Income Payments by Years, 1929, 1932, and 1937–39*

[Millions of dollars]

Item	1929	1932	1937	1938	1939
National income [1]	82,885	40,074	70,925	63,459	69,308
Less business savings [2]	1,339	−8,157	−803	−2,284	−294
Distributive shares	81,546	48,231	71,728	65,743	69,602
Other deductions:					
Social Security contributions of employers			950	1,119	1,196
Social Security contributions of employees			329	295	319
Contributions to Railroad Retirement Fund			122	108	112
Contributions to retirement systems for governmental employees	131	160	215	223	234
Additions:					
Direct relief	60	326	837	1,008	1,067
Federal pensions to veterans	421	548	398	409	422
Adjusted service benefits		147	128	57	34
Other governmental retirement allowances	168	227	269	268	279
Unemployment compensation			1	396	429
Railroad retirement benefits			35	96	109
Old-age insurance benefits			3	10	15
Income payments [3]	82,064	49,319	71,783	66,242	70,096

[1] National-income figures differ slightly from those published in the June 1940 Survey of Current Business and summarized in the Monthly Labor Review of August 1940. The national income totals for the years 1933 to 1939 have been significantly revised owing to important revisions in estimated work-relief wages which were made subsequent to the publication of the national-income estimates for 1939. Several additional changes of a minor character have also been effected for the years 1938 and 1939.

[2] Exclusive of business savings in agriculture.

[3] The figures of income payments differ from formerly published figures of "national income paid out," partly because of revisions made in the light of new data and partly because of changes in the concept. These changes were made for the purpose of showing more adequately the current flow of means of payment to consumers as a measure of purchasing power or of command over the output of goods and services.

Wages and Hours of Labor

AVERAGE WEEKLY HOURS IN MANUFACTURING, OCTOBER-NOVEMBER 1940 [1]

IN ORDER to obtain information on variations in working hours among individual plants, the Bureau of Labor Statistics has made a special tabulation of the reports of more than 26,000 factories employing 5½ million wage earners. Data on weekly hours supplied by cooperating employers are regularly published by the Bureau only in the form of industry averages; the purpose of this tabulation, therefore, is to shed light on the nature of the dispersion of the various plants about the industry average. For example, although average hours per week in all manufacturing industries were 38.6 in November 1940, one out of every four plants for which reports were received in the latter part of 1940 was working an average of 42 hours or more weekly.

Average weekly hours were computed for each plant which supplied man-hour information to the Bureau in October or November 1940. These plants employ over 60 percent of the estimated number of wage earners in all manufacturing industries. As mid-November reports were not available for nearly half of the firms at the time of the survey, it was necessary to include many reports for the middle of October.[2]

The inclusion of both October and November reports in the tabulations is not believed to affect materially the general character of the distributions. However, two circumstances should be referred to as probably occasioning some changes in plant averages between October and November: (1) the occurrence of Armistice Day in the November period, and (2) the change in maximum working hours from 42 to 40 under the Fair Labor Standards Act, effective October 24.[3]

Average working hours were computed for each plant by dividing the total number of man-hours worked during the given week by the total number of wage earners on the pay roll in that week. As some employees may not have worked a full week, the resulting average is somewhat less than full-time hours. The computed weekly hours

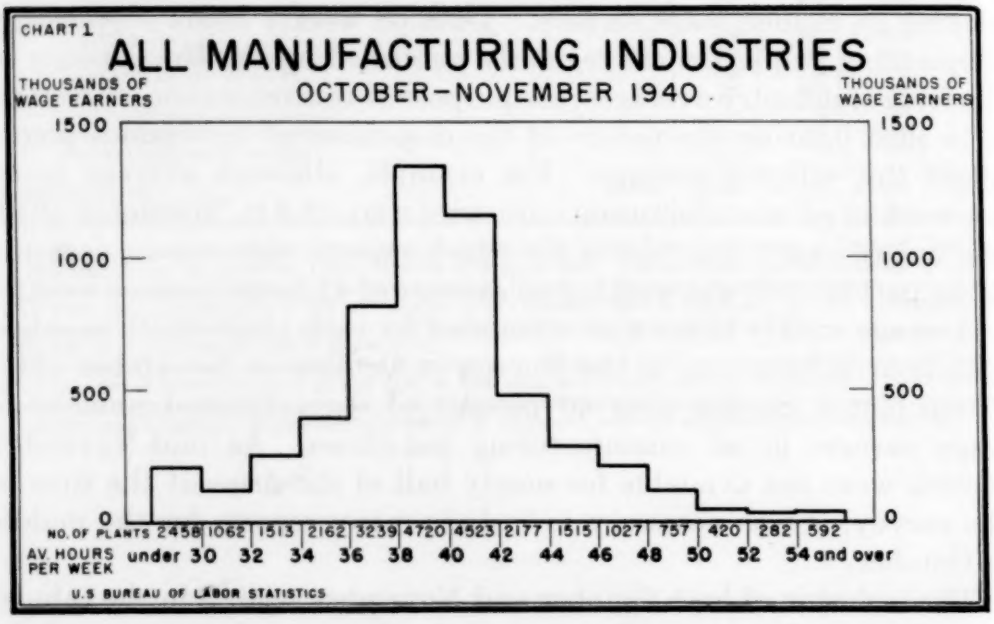
[1] Prepared by R. B. Steffes, of the Bureau's Employment Statistics Division, under the direction of Lewis E. Talbert, chief; T. F. Mosimann was in charge of the tabulations.

[2] This was true in those cases where employers report directly to cooperating State agencies, which in turn tabulate the information for the Bureau.

[3] For a discussion of the general effects of these factors on average working hours, see Monthly Labor Review, March 1941 (p. 521); Employment and Earnings in 1940.

are employee-hours, and give no clue either as to the distribution of employees within plants or to the number of shifts the plants were operating. Many plants were working two or three shifts per day.[4]

The results of the special tabulation of plants according to average working hours per week are shown in the table on page 985. The first column gives the number of wage earners employed by those plants for which reports were received; while the remaining columns present a percentage distribution of these wage earners according to plant averages of hours worked per week. The totals for industry groups, for durable and nondurable goods, and for all manufacturing are unweighted totals of all reports received from firms in the various industries. A summary for all manufacturing is shown in chart 1.

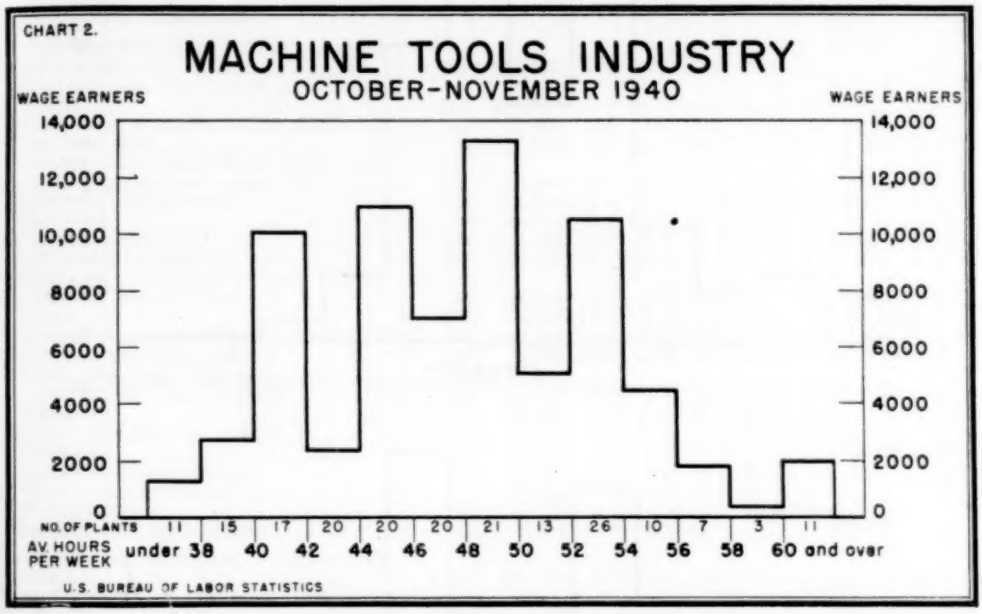


Long working hours were common among employees of those industries most directly affected by the Defense Program. About half of the wage earners in all manufacturing were in plants reporting average employee-hours of 40 or more per week in the latter part of 1940. Plants in the nondurable goods industries, which for the most part have not been the recipients of large orders for war materials, predominate in the intervals below 40 hours. Almost three-fourths of the workers reported in the nondurable goods industries were in plants having average employee hours of less than 40 per week; while in contrast, only two-fifths of the workers in durable goods industries were in such plants.

There were 4 durable goods industries in October-November 1940 in which more than one-fourth of the reported wage earners were

[4] See Monthly Labor Review, March 1941 (p. 539); Extent of Week-end Shut-downs in Selected Defense Industries.

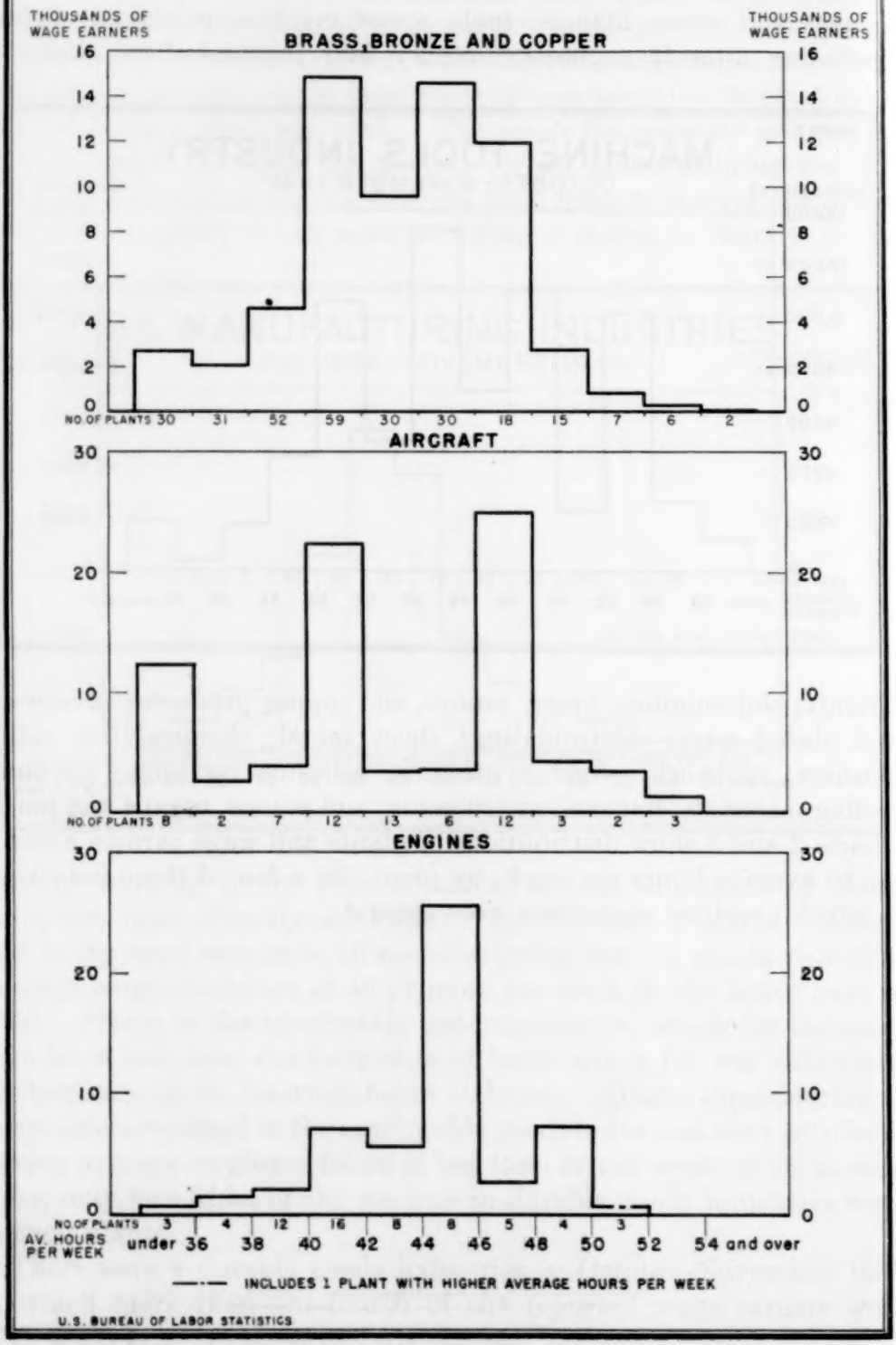
in plants averaging 48 or more hours per worker. These industries were firearms, machine tools, machine tool accessories, and typewriters and parts. In 22 others, one-fourth of the wage earners were in plants averaging 44 or more hours per worker: bolts, nuts, washers, and rivets; iron and steel forgings; steam and hot-water heating apparatus and steam fittings; tools; screw machine products; engines (including aircraft engines); foundry and machine-shop products;



aircraft; shipbuilding; brass, bronze, and copper products; silverware and plated ware; electroplating; sheet metal; chemical fire extinguishers; millwork; wood synthetics; asbestos products; gypsum; roofing materials; buttons; instruments; and pianos, organs and parts. Charts 2 and 3 show distributions of plants and wage earners according to average hours per week, by plant, for a few of these industries in which overtime operations were general.

CHART 3.

DISTRIBUTION OF WAGE EARNERS
ACCORDING TO AVERAGE WEEKLY HOURS BY PLANTS
OCTOBER – NOVEMBER 1940



Percentage Distribution of Wage Earners in Manufacturing, by Average Hours Worked per Week in Each Plant, October-November 1940 [a]

Industry	Number of plants reporting	Number of wage earners in reporting plants	Percent of wage earners in plants reporting average hours per week— Less than 36.0	36.0 to 37.9	38.0 to 39.9	40.0 to 41.9	42.0 to 43.9	44.0 to 47.9	48.0 to 53.9	54.0 and over
All manufacturing	26,447	5,584,202	17.9	14.6	24.1	20.7	8.7	9.2	3.9	0.9
Durable goods	10,803	3,009,374	9.8	9.7	23.3	26.1	11.6	13.2	5.3	1.0
Nondurable goods	15,644	2,574,828	27.5	20.4	24.9	14.4	5.3	4.5	2.2	.8
Durable goods										
Iron and steel and their products, not including machinery	2,317	867,373	7.6	15.6	36.7	17.8	9.1	8.8	3.4	1.0
Blast furnaces, steel works, and rolling mills	324	470,117	5.9	21.2	48.6	12.0	7.7	2.3	2.3	-----
Bolts, nuts, washers, and rivets	62	13,867	2.4	10.6	25.8	18.1	6.5	23.1	[1] 13.5	-----
Cast iron pipe	65	17,098	6.3	11.4	22.0	28.0	11.7	11.6	7.0	2.0
Cutlery (not including silver and plated cutlery) and edge tools	110	14,485	4.8	8.1	21.9	43.5	8.3	10.1	2.5	.8
Forgings, iron and steel	92	13,390	3.4	4.7	17.6	16.8	22.2	26.8	6.0	2.5
Hardware	155	49,514	8.3	6.7	16.5	46.3	8.7	12.8	1.7	-----
Plumbers' supplies	106	25,940	12.2	11.5	27.1	25.9	8.2	8.7	4.0	2.4
Stamped and enameled ware	209	38,328	18.5	10.5	27.2	18.5	9.6	12.3	3.3	.1
Steam and hot-water heating apparatus and steam fittings	88	31,714	1.7	4.9	16.3	30.7	5.9	36.4	2.5	1.7
Stoves	220	35,592	10.5	8.4	25.3	20.5	10.4	16.0	5.6	3.3
Structural and ornamental metal work	298	28,788	17.4	12.6	22.7	14.9	11.8	14.0	4.8	1.8
Tin cans and other tinware	127	26,108	22.5	19.2	25.7	19.6	7.7	1.4	[1] 3.9	-----
Tools (not including edge tools, machine tools, files and saws)	126	15,340	4.3	2.7	16.7	22.7	15.0	27.6	2.4	8.6
Wirework	156	29,980	5.5	11.8	30.6	20.1	18.6	3.8	9.1	.5
Doors, shutters, etc., metal	16	2,282	7.0	13.4	9.1	33.0	[2] 37.5	-----	-----	-----
Firearms	11	15,461	-----	-----	7.7	-----	14.5	46.9	[1] 30.9	-----
Screw-machine products	75	11,005	6.0	1.6	1.1	20.8	6.2	46.3	14.0	4.0
Wire drawn from rods	41	17,275	9.6	3.4	33.3	24.7	15.2	9.5	[1] 4.3	-----
Wrought pipe	25	8,270	6.3	15.8	45.4	25.0	[2] 7.5	-----	-----	-----
Steel barrels, kegs, drums	11	2,819	20.5	14.3	39.6	15.3	-----	[1] 10.3	-----	-----
Machinery, not including transportation equipment	3,510	857,387	7.3	[4] 4.9	19.7	[2] 26.5	12.8	15.9	10.9	2.0
Agricultural implements (including tractors)	105	55,851	5.6	6.8	59.8	26.0	.7	[3] 1.1	-----	-----
Cash registers, adding machines, and calculating machines	30	18,813	[3] 1.9	-----	32.6	58.6	3.5	[3] 3.4	-----	-----
Electrical machinery, apparatus and supplies	553	233,055	5.0	4.0	17.4	30.7	23.6	11.9	7.0	.4
Engines, turbines, water wheels and windmills (including aircraft engines)	63	53,543	1.4	2.8	3.7	13.4	10.6	53.0	[1] 15.1	-----
Foundry and machine-shop products	2,169	287,672	7.3	6.2	20.5	25.3	13.5	17.5	8.3	1.4
Machine tools	194	72,260	1.4	.1	3.8	14.0	3.4	25.0	40.2	12.1
Radios and phonographs	67	45,622	7.8	12.3	20.2	45.0	5.1	5.0	4.6	-----
Textile machinery and parts	79	14,034	23.5	8.4	9.4	37.8	3.3	16.0	[1] 1.6	-----
Typewriters and parts	12	15,557	-----	[4] 10.9	-----	24.6	-----	9.9	54.6	-----
Machine tool accessories	77	11,445	[3] 3.1	-----	2.2	3.4	20.8	19.5	26.7	24.3
Pumps	98	12,919	18.2	4.5	21.9	22.4	10.2	14.2	[3] 8.6	-----
Refrigerators and refrigerating equipment	37	23,004	57.6	3.8	8.1	24.4	2.6	[3] 2.3	-----	1.2
Sewing machines	8	8,263	-----	-----	79.2	4.7	-----	[3] 16.1	-----	-----
Washing machines, dryers, etc	18	5,349	[3] 33.0	-----	36.5	[2] 30.5	-----	-----	-----	-----
Transportation equipment	675	689,472	6.5	5.4	13.4	[2] 42.3	[3] 14.9	15.2	2.3	(6)
Aircraft	68	82,621	15.0	3.2	4.7	27.1	4.1	34.8	11.1	-----
Automobiles	371	472,472	2.0	5.0	11.2	51.7	19.1	9.9	1.1	(6)
Cars, electric- and steam-railroad	70	28,562	35.4	9.7	20.0	12.4	.2	21.0	[1] 1.3	-----
Locomotives	10	8,019	2.7	-----	41.6	50.3	[3] 5.4	-----	-----	-----
Shipbuilding	140	92,058	13.9	8.2	27.3	15.1	9.2	25.1	[1] 1.2	-----
Motorcycles, bicycles, and parts	16	5,740	5.0	14.6	17.8	[2] 62.6	-----	-----	-----	-----
Nonferrous metals and their products	902	184,612	[3] 6.6	[4] 6.8	20.9	23.8	13.5	23.5	4.6	.3
Aluminum manufactures	46	17,169	1.3	12.0	32.2	26.7	18.6	5.4	3.4	.4
Brass, bronze, and copper products	280	65,084	4.2	3.3	7.2	23.0	14.9	41.0	6.3	.1
Clocks, watches, and time-recording devices	33	21,060	[3] 1.6	-----	23.7	37.9	20.3	[3] 16.5	-----	-----
Jewelry	182	15,524	17.8	12.9	7.8	31.8	13.7	13.3	2.1	.6
Lighting equipment	84	13,115	6.3	15.9	19.9	30.0	14.0	11.2	[1] 2.7	-----
Silverware and plated ware	43	10,190	3.0	4.2	4.5	[3] 11.0	-----	53.8	23.5	-----
Smelting and refining—copper, lead, and zinc	50	29,386	9.6	11.6	57.3	[3] 18.4	-----	3.0	.1	-----
Electroplating	34	2,135	11.1	6.5	25.4	17.6	4.6	25.2	[1] 9.6	-----
Sheet metal	121	5,988	6.2	6.1	23.4	24.3	5.6	23.9	6.9	3.6
Smelting and refining other than gold, silver, and platinum	21	3,435	42.9	-----	9.8	20.9	18.4	7.0	[1] 1.0	-----
Fire extinguishers (chemical)	8	1,526	-----	[4] 9	-----	11.7	57.2	[3] 30.2	-----	-----

See footnotes at end of table.

Percentage Distribution of Wage Earners in Manufacturing, by Average Hours Worked per Week in Each Plant, October-November 1940 [a]—Continued

Industry	Number of plants reporting	Number of wage earners in reporting plants	Percent of wage earners in plants reporting average hours per week—							
			Less than 36.0	36.0 to 37.9	38.0 to 39.9	40.0 to 41.9	42.0 to 43.9	44.0 to 47.9	48.0 to 53.9	54.0 and over
Durable goods—Continued										
Lumber and allied products	2,148	273,060	25.7	13.5	20.0	16.7	[2] 8.7	[3] 10.9	3.8	0.7
Furniture	581	76,827	13.6	8.9	26.6	21.9	10.0	14.5	4.2	.3
Lumber:										
Millwork	478	30,655	13.5	5.8	16.9	18.0	11.0	22.8	10.0	2.0
Sawmills	739	130,239	34.9	18.5	16.6	14.1	7.0	5.5	2.6	.8
Caskets and morticians' goods	93	4,877	25.3	18.8	34.5	15.7	3.7	[2] 2.0	.....	.....
Wood preserving	35	4,163	71.9	5.5	7.3	8.0	[2] 7.3	.....	.....	.....
Wood turned and shaped	81	6,970	14.7	9.2	34.3	22.5	15.3	1.8	2.2	.....
Wooden boxes (other than cigar)	107	9,624	43.4	7.6	9.8	11.0	9.7	11.7	6.8	.....
Synthetics, wood	34	9,705	5.0	16.8	22.2	11.9	11.1	[3] 33.0	.....	.....
Stone, clay, and glass products	1,251	137,470	[5] 27.6	[4] 19.4	22.1	15.3	7.1	6.7	1.4	.4
Brick, tile, and terra cotta	458	37,031	29.4	19.3	22.6	12.7	8.1	6.0	1.1	.8
Cement	129	21,048	7.3	14.9	37.2	19.8	11.4	[1] 9.4	.....	.....
Glass	42	23,523	61.7	23.7	8.9	[5] 5.5	.....	.2	.....	.....
Marble, granite, slate, and other products	232	5,993	43.9	11.5	23.1	11.2	5.2	1.6	1.5	2.0
Pottery	116	24,641	22.7	21.0	30.2	11.6	5.4	8.8	.3	.....
Asbestos products	22	5,870	9.6	12.2	10.2	[5] 40.9	.....	[3] 27.1	.....	.....
Concrete products	73	1,752	33.2	18.6	3.3	14.6	8.3	11.6	5.2	5.2
Lime	78	5,581	16.3	27.5	20.8	[5] 18.5	.....	7.2	7.2	2.5
Gypsum	29	3,248	[5] 8.8	.....	11.2	44.1	6.8	10.9	18.2	.....
Mirrors	49	2,552	10.8	13.8	13.9	25.7	23.7	9.9	2.2	.....
Wallboard and plaster (except gypsum)	13	4,681	2.6	[4] 51.3	.....	41.4	[2] 4.7	.....	.....	.....
Nondurable goods										
Textiles and their products	4,946	1,096,404	36.5	27.2	22.8	[2] 9.3	2.3	1.3	.5	.1
Fabrics	2,864	852,604	30.5	29.7	25.4	10.4	2.4	1.1	[1] .5	.....
Carpets and rugs	29	23,982	35.3	16.0	34.1	12.2	[3] 2.4	.....	.....	.....
Cotton goods	771	369,070	28.1	40.6	21.3	7.8	1.1	1.0	[1] .1	.....
Cotton small wares	126	12,541	12.1	15.5	43.2	9.1	14.5	3.9	1.7	.....
Dyeing and finishing textiles	209	52,662	20.7	22.3	27.6	19.6	5.2	1.5	3.0	.1
Hats, fur-felt	38	7,059	90.2	.3	4.7	4.8	.....	.....	.....	.....
Knit goods	686	147,879	35.5	25.3	23.6	12.9	1.6	[1] .7	.4	.....
Hosiery	279	90,975	37.4	25.5	23.6	11.6	1.2	.4	.3	.....
Knitted outerwear	206	16,811	35.5	13.7	25.1	18.7	3.7	2.5	.7	.....
Knitted underwear	134	33,999	34.6	33.6	20.6	9.8	.6	.....	.8	.....
Knitted cloth	67	6,094	14.0	7.9	35.3	32.5	8.9	[5] 6.7	.....	.8
Silk and rayon goods	381	64,092	37.8	28.3	24.7	7.0	1.7	[1] .5	.....	.....
Woolen and worsted goods	400	146,360	33.2	15.4	34.9	10.4	3.6	1.9	.4	.2
Bag, other than paper	50	5,573	18.6	10.5	34.1	26.3	3.4	[3] 7.1	.....	.....
Cordage and twine	55	9,209	6.9	28.5	34.9	19.9	7.3	[3] 2.5	.....	.....
Curtains, draperies, etc	27	2,943	33.2	19.3	8.3	28.9	10.3	.....	.....	.....
Household furnishings	61	5,816	8.0	41.7	10.1	21.1	14.5	[3] 4.6	.....	.....
Jute goods (except felt)	11	2,543	3.2	15.3	29.9	51.6	.....	.....	.....	.....
Handkerchiefs	20	2,875	10.8	29.3	45.3	10.5	[10] 4.1	.....	.....	.....
Wearing apparel	2,082	243,800	57.4	18.7	13.5	[2] 5.3	[2] 2.3	1.7	[1] .7	.4
Clothing, men's	865	102,432	64.5	19.1	8.9	3.4	2.3	.6	.8	.4
Clothing, women's	698	64,152	56.0	16.8	15.8	4.8	2.3	3.6	.4	.3
Corsets and allied garments	48	10,660	37.6	14.3	22.3	13.8	7.5	4.5	.....	.....
Men's furnishings	118	12,606	40.9	22.1	17.5	4.2	6.9	6.4	[1] 2.0	.....
Millinery	101	4,384	72.6	4.7	4.4	13.3	[2] 5.0	.....	.....	.....
Shirts and collars	230	46,378	51.1	21.8	18.0	7.7	.1	(6)	.7	.6
Gloves and mittens, cloth or cloth and leather	22	3,188	57.9	19.6	17.3	[2] 5.2	.....	.....	.....	.....
Leather and its manufactures	685	167,094	44.7	23.6	19.3	8.1	[2] 2.4	1.6	[1] .2	.1
Boots and shoes	367	120,402	51.8	25.8	14.9	5.3	1.1	[1] .9	.....	.2
Leather	149	29,190	22.6	16.9	30.8	19.7	5.0	4.9	[1] .1	.....
Boot and shoe, cut stock and findings	82	6,985	39.2	25.1	22.1	5.3	[2] 8.3	.....	.....	.....
Gloves, leather	47	5,617	23.8	22.9	26.9	13.3	10.5	2.6	.....	.....
Handbags and purses, women's	17	3,199	38.5	.....	49.6	[3] 11.9	.....	.....	.....	.....
Trunks, suitcases, etc	23	1,701	18.0	31.4	34.6	[3] 10.9	.....	[3] 5.1	.....	.....
Food and kindred products	3,854	428,599	[4] 20.0	10.2	21.0	[5] 17.4	9.6	11.8	[1] 7.2	2.8
Baking	875	76,859	9.2	7.2	22.6	16.2	17.0	18.6	8.4	.8
Beverages	513	35,060	25.3	24.9	17.4	20.4	4.7	4.0	2.5	.8
Butter	258	4,741	12.5	3.1	10.2	5.5	10.9	31.8	18.0	8.0
Canning and preserving	835	93,880	44.3	8.4	9.6	7.0	6.6	11.0	8.1	5.0
Confectionery	247	39,469	15.4	10.2	27.5	14.5	19.6	11.8	[1] 1.0	.....
Flour	335	15,215	18.5	7.8	10.3	23.4	15.2	11.4	9.1	4.3

See footnotes at end of table.

Percentage Distribution of Wage Earners in Manufacturing, by Average Hours Worked per Week in Each Plant, October-November 1940 [a]—Continued

Industry	Number of plants reporting	Number of wage earners in reporting plants	Percent of wage earners in plants reporting average hours per week—							
			Less than 36.9	36.0 to 37.9	38.0 to 39.9	40.0 to 41.9	42.0 to 43.9	44.0 to 47.9	48.0 to 53.9	54.0 and over
Nondurable goods—Continued										
Food and kindred products—Continued.										
Ice cream	227	7,128	4.2	5.1	19.1	7.5	10.2	26.6	17.0	10.3
Slaughtering and meat packing	308	109,759	11.5	11.3	31.8	32.2	5.6	5.3	2.1	.2
Sugar, beet	60	19,249	[4] 3.0	----	----	----	1.5	38.0	43.1	14.4
Sugar refining, cane	20	13,092	16.9	14.7	44.9	11.2	----	1.9	6.6	3.8
Cereal preparations	14	4,994	47.4	20.2	28.7	[3] 3.7	----	----	----	----
Condensed and evaporated milk	82	5,538	7.1	4.1	7.9	10.8	36.9	18.4	9.5	5.3
Feeds, prepared	73	2,777	9.4	13.3	21.7	28.1	7.1	12.4	5.6	2.4
Tobacco manufactures	209	66,345	18.3	26.4	[7] 49.2	3.2	2.2	----	[2] .6	.1
Chewing and smoking tobacco and snuff	32	7,380	60.1	13.8	[7] 26.1	----	----	----	----	----
Cigars and cigarettes	177	58,965	13.1	28.0	52.1	3.5	2.5	----	[2] .7	.1
Paper and printing	3,548	334,205	18.7	14.0	23.6	[8] 22.2	12.0	7.1	[1] 2.0	.4
Boxes, paper	612	50,900	10.0	9.1	25.8	25.6	16.1	7.9	3.7	1.8
Paper and pulp	425	124,950	7.8	13.3	24.9	25.3	15.8	10.2	2.6	.1
Printing and publishing:										
Book and job	1,469	70,131	21.4	16.6	25.0	20.5	9.2	5.5	1.6	.2
Newspapers and periodicals	665	46,400	53.6	16.9	11.5	12.5	2.5	2.0	.7	.3
Bags, paper	24	4,340	26.3	6.6	28.7	[8] 38.4	----	----	----	----
Envelopes	45	4,106	8.4	13.6	31.5	31.8	7.5	7.2	----	----
Paper goods, n. e. c	104	15,800	18.5	14.5	26.9	26.8	7.1	4.5	[1] 1.7	----
Bookbinding	77	7,798	19.0	30.7	35.1	7.1	8.1	----	----	----
Lithographing	75	7,335	9.7	3.5	23.5	18.4	30.0	13.4	1.5	----
Photoengraving	52	2,445	40.9	10.5	29.3	10.5	7.7	1.1	----	----
Chemical, petroleum and coal products	1,680	277,591	13.5	17.4	33.8	23.6	4.1	4.6	2.4	.6
Petroleum refining	141	62,606	40.4	48.1	8.1	[8] 3.1	----	.2	.1	----
Chemicals	237	63,391	.9	2.4	37.8	43.6	7.6	3.7	4.0	----
Cottonseed—oil, cake, and meal	139	7,718	18.4	1.4	6.0	3.0	8.9	23.6	26.8	11.9
Druggists' preparations	67	7,740	.9	14.8	44.1	35.4	.9	[1] 3.9	----	----
Explosives	33	6,569	4.2	6.1	41.0	43.5	1.1	[1] 4.1	----	----
Fertilizers	332	11,517	51.3	16.4	12.9	6.7	1.5	1.5	1.4	2.3
Paints and varnishes	471	21,613	4.6	9.0	29.0	30.9	14.0	7.6	4.2	.7
Rayon and allied products	26	49,518	----	15.9	72.2	11.9	----	----	----	----
Soap	78	16,109	8.2	5.6	55.4	24.0	4.2	1.8	----	[3] .8
Ammunition	12	14,859	----	[12] 9.6	----	64.8	[2] 25.6	----	----	----
Compressed and liquefied gases	42	3,270	----	3.0	2.3	31.3	1.4	59.6	2.4	----
Grease and tallow	29	1,295	46.4	22.5	9.8	4.7	3.4	5.2	[1] 8.0	----
Perfumes	43	6,154	6.5	.7	45.0	22.5	15.8	9.5	----	----
Coke-oven products	16	3,819	13.5	19.9	53.7	[8] 12.9	----	----	----	----
Rubber products	231	112,038	23.3	19.5	[11] 27.5	18.6	[2] 5.2	1.5	[1] 4.4	----
Rubber boots and shoes	12	16,091	----	----	[11] 51.7	41.7	6.6	----	----	----
Rubber tires and inner tubes	36	53,789	41.2	27.8	18.1	4.0	[2] 2.0	----	[1] 6.9	----
Rubber goods, other	183	42,158	9.5	16.2	30.3	28.4	8.8	4.1	2.7	----
Miscellaneous industries										
Roofing materials	22	3,501	5.9	----	33.3	7.3	5.8	[3] 47.7	----	----
Buttons	46	5,448	27.2	7.6	23.9	11.1	3.8	22.0	[1] 4.4	----
Instruments	49	18,299	[5] 4.3	----	12.6	34.0	2.6	25.4	21.1	----
Mattresses and bedsprings	168	9,837	13.1	26.8	34.7	10.6	7.7	5.9	.3	.9
Optical goods	26	8,349	6.1	44.7	12.2	21.2	[3] 15.8	----	----	----
Photographic apparatus	19	18,365	----	----	[3] 85.8	8.8	.7	4.7	----	----
Pianos, organs, and parts	41	6,081	10.5	----	22.6	24.9	11.7	[3] 30.3	----	----
Sporting goods	39	6,194	26.8	10.0	26.0	25.3	9.6	[1] 2.3	----	----
Surgical and orthopedic appliances	33	4,180	21.1	17.6	34.6	24.1	[2] 2.6	----	----	----
Toys (not including wheel goods)	38	11,318	11.7	6.7	29.6	22.6	24.6	2.0	----	[3] 2.8

[a] Distributions not shown for a few industries because only a limited number of reports were available. These reports have, however, been included in the group totals.

[1] Includes 1 plant with average weekly hours of 54.0 and over.
[2] Includes 1 plant with average weekly hours between 44.0 and 47.9.
[3] Includes 1 plant with average weekly hours between 48.0 and 53.9.
[4] Includes 1 plant with average weekly hours between 38.0 and 39.9.
[5] Includes 1 plant with average weekly hours between 36.0 and 37.9.
[6] Less than 0.5 percent.
[7] Includes 1 plant with average weekly hours between 40.0 and 41.9.
[8] Includes 1 plant with average weekly hours between 42.0 and 43.9.
[9] Includes 2 small plants with average weekly hours between 48.0 and 53.9.
[10] Includes 2 small plants with average weekly hours between 44.0 and 47.9.
[11] Includes 1 plant with average weekly hours under 36.0.
[12] Includes 1 plant with average weekly hours under 36.0 hours and 1 plant between 38.0 and 39.9.

HOURLY EARNINGS IN DRUG, MEDICINE, AND TOILET PREPARATIONS INDUSTRY, MAY 1940 [1]

Summary

AVERAGE hourly earnings in the drug, medicine, and toilet preparations industry in May 1940 were 54.6 cents. Males earned an average of 65.9 cents an hour and females, 46.3 cents an hour. In all, it was estimated that 44,604 workers, employed in 1,441 plants, were included in the industry covered by the study. The basic data for the survey were secured through mail questionnaires.

In the drug and medicine branch of the industry, male workers averaged 67.0 cents an hour and females, 47.4 cents. The average earnings of all workers were 56.6 cents.

Hourly wages in the toilet preparations branch amounted to 49.7 cents, males averaging 62.2 cents and females, 44.2 cents.

Definition of the Industry

As defined by the Administrator of the Wage and Hour Division the drug, medicine, and toilet preparations industry includes:

> The manufacture or packaging of any one or more of the following products (except shaving cream, shampoo, glycerine, or soap): (a) Drugs or medicinal preparations, other than food, intended for internal or external use in the diagnosis, treatment, or prevention of disease in, or to affect the structure or any function of the body of man or other animals, or (b) dentifrices, cosmetics, perfume or other preparations designed or intended for external application to the person for the purpose of cleansing, improving the appearance of, or refreshing the person.

In recognition of differences in the characteristics of the branches of the industry, however, and to facilitate the analysis of the material reported, it was considered desirable in the present study to distinguish the following classes of plants or departments of plants:

1. *Manufacturers of drugs and medicines.*—Plants reporting 50 percent or more of their 1939 sales revenues derived from drugs and medicines of their own manufacture.[2]

2. *Manufacturers of toilet preparations.*—Plants reporting 50 percent or more of their 1939 sales revenues derived from toilet preparations of their own manufacture.

3. *Combined product manufacturers.*—Plants reporting 50 percent or more of their 1939 sales revenues derived from drugs, medicines, and toilet preparations combined, of their own manufacture, but not eligible for inclusion in groups 1 or 2 above.

4. *Manufacturers of drugs, medicines, and toilet preparations as a minor product.*—Manufacturing plants engaged in the industry but reporting less than 50 percent of their 1939 sales revenues derived from drugs, medicines, and toilet preparations of their own manufacture.

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[1] Prepared by Sidney C. Sufrin, assisted by Donald L. Helm, of the Bureau's Division of Wage and Hour Statistics. For a more detailed report, see Serial No. R. 1252 of this Bureau.

[2] The term "manufacturing" includes packaging as well as processing.

5. *Manufacturing departments of distributors.*—Departments carrying on the manufacture of drugs, medicines, or toilet preparations as an incidental activity of plants primarily engaged in distribution.

6. *Central administrative offices* of firms engaged in the industry.

In view of the fact that a very large proportion of the workers in the industry are employed by the first two groups of producers, the present study is devoted primarily to them.

Coverage and Method of Study

The Census of Manufactures has classified the drug and medicine industry separately from the manufacture of perfumes, cosmetics, and other toilet preparations. The former of these two industries consisted in 1937 of 1,013 establishments, which employed an average of 6,895 clerical employees and 24,095 wage earners.

The perfume, cosmetics, and other toilet preparations industry is appreciably smaller than the drug and medicine industry. According to the Census of Manufactures there were 478 establishments with 10,158 wage earners in 1937.

Both branches of the industry tend to be concentrated in the Northeastern and Midwestern regions of the country,[3] and are heavily concentrated in and about large cities.[4]

The present study of hourly earnings in the drug, medicine, and toilet preparations industry is based on data obtained by questionnaire from 1,028 members of the industry, who recorded certain pay-roll information for 45,250 employees. The information pertained to the pay-roll period ending nearest May 15, 1940. Hourly earnings at this time of year are believed to be fairly representative of normal conditions in the industry. It is true that employment and production show some seasonal fluctuations, but early May does not appear to be an extremely busy nor an extremely slack period.

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[3] For the purposes of this report, the Northwestern region includes Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, Ohio, South Dakota, and Wisconsin. The Northeastern region includes Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. The Southern region includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. The Western region includes California, Colorado, Oregon, Utah, and Washington.

[4] A tally of the unweighted reports received from the drug and medicine branch reveals that slightly over one-half of the plants and nearly two-thirds of the workers are located in metropolitan areas with a population of 1,000,000 and over. Urban concentration is even more pronounced in the toilet preparations branch. The unweighted returns from this branch show that more than seven-tenths of the plants and eight-tenths of the workers are in population centers of 1,000,000 and over. Roughly eight-tenths of the plants and seven-eighths of the workers in the drug and medicine branch, and over nine-tenths of both plants and workers in the toilet preparations branch, are found in metropolitan areas of 100,000 and over.

Especially well-marked is the concentration of plants and employment of both branches of the industry in the New York metropolitan area. No less than 25 percent of the drug and medicine establishments, employing about 30 percent of all the workers in that branch, and approximately 44 percent of the toilet preparations plants, employing nearly two-thirds of the workers in that branch, were in the New York metropolitan area.

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Since the data were collected by mail, instead of by field agents, it was not possible to secure the detailed information which appears in other wage and hour studies of the Bureau of Labor Statistics. The present study, therefore, throws no light on the earnings in the several occupations of the industry, on the composition of the laboring force by occupational or skill groups, nor on methods of payment, overtime rates, or prevalence of union agreements. It is known from other sources, however, that payment on a time basis was typical in the industry at the time of this study, and that union agreements were relatively uncommon.

The extent to which the usable questionnaires returned represent the various geographic regions and the sizes of establishments is roughly indicated in table 1, in which the establishments reporting are expressed as a percentage of the corresponding census figures. It will be noted that the representation is less than 40 percent for only 3 classes of establishments. In a few instances, presumably because of changes in the composition of the industry since 1937, the establishments reported by questionnaire actually exceeded the number reported by the census.

Although conclusions might have been drawn directly from the payroll data secured by questionnaire, it was deemed advisable, before preparing the final tabulations, to make correction for differences in the completeness of representation of the various geographic areas and sizes of establishments. In arriving at properly "weighted" figures, use was made of unpublished census information regarding the size composition of plants in the various States.

TABLE 1.—*Plants Returning Usable Questionnaires, as Percentage of Establishments Reported by 1937 Census of Manufactures, by Region and Size Class*

Region	Total percentage coverage	Percent of coverage in plants employing—			
		1 to 20 workers	21 to 100 workers	101 to 250 workers	251 workers and over
Drug and medicine branch—total	61.8	56.5	68.0	105.3	125.0
Northeastern region	75.6	69.7	81.5	100.0	160.0
Midwestern region	50.4	45.0	55.1	114.3	88.9
Southern region	55.9	55.2	50.0	[1] 83.3	[2]
Western region	47.9	45.5	[1] 80.0	[2]	
Toilet preparations branch—total	42.1	32.2	79.2	78.9	91.7
Northeastern region	50.2	40.4	68.2	71.4	111.1
Midwestern region	38.6	26.5	95.0	[1] 57.1	[2]
Southern region	28.8	23.9	66.7		
Western region	34.1	24.4	[1] 166.7	[2]	

[1] Percentage combined with next larger class.
[2] Less than 3 plants reporting. Data have been combined with data of preceding interval.

Earnings in Major Branches of the Industry

AVERAGE HOURLY EARNINGS, BY REGION

The average hourly earnings of all workers [5] in the industry amounted to 54.6 cents in May 1940.[6] Regionally, the highest average hourly earnings (57.4 cents) were received by workers in the Midwest. The lowest average hourly remuneration (44.2 cents) was earned by workers in the South. This was fully 13 cents less than average earnings in the Midwest and almost 10.5 cents less than the average for all workers in the industry. The average hourly earnings of 55.7 cents paid workers in the Western region were slightly higher (1.1 cents) than the average for the industry, while the average wage of 53.8 cents an hour paid workers in the Northeastern region was less than 1 cent below the average earnings of workers in the industry as a whole.

TABLE 2.—*Average Hourly Earnings and Percentage Distribution of Estimated Number of Workers, May 1940, by Branch of Industry, Region, and Sex*

Branch of industry and region	Average hourly earnings			Percent of workers		
	All workers	Males	Females	All workers	Males	Females
Total industry	$0.546	$0.659	$0.463	100.0	42.1	57.9
Northeastern region	.538	.654	.452	100.0	42.6	57.4
Midwestern region	.574	.691	.487	100.0	42.3	57.7
Southern region	.442	.499	.408	100.0	37.4	62.6
Western region	.557	.636	.509	100.0	37.4	62.6
Drug and medicine branch	.566	.670	.474	100.0	46.9	53.1
Northeastern region	.562	.664	.460	100.0	50.0	50.0
Midwestern region	.588	.700	.497	100.0	44.7	55.3
Southern region	.452	.503	.420	100.0	37.8	62.2
Western region	.573	.667	.514	100.0	38.6	61.4
Toilet preparations branch	.497	.622	.442	100.0	30.7	69.3
Northeastern region	.497	.626	.441	100.0	30.1	69.9
Midwestern region	.508	.634	.450	100.0	31.6	68.4
Southern region	.395	.481	.348	100.0	35.4	64.6
Western region	.535	.592	.503	100.0	35.7	64.3

Drug and medicine branch.—The workers in the drug and medicine branch received average earnings of 56.6 cents an hour, which was 2 cents higher than the average for the industry as a whole. Average hourly earnings in this branch in the 4 regions ranged from 1.0 to 2.4 cents an hour higher than those in the entire industry in the same areas.

[5] The term "workers" as used throughout this study includes production, clerical, maintenance, and shipping, as well as inside selling employees. By and large the average hourly earnings reported in the survey do not reflect additional earnings for overtime.

[6] All the hourly wage rates in this study were computed from "hours paid for" rather than from "hours worked."

In filling out the questionnaires, the companies were requested to report *total hours paid for* rather than *total hours actually worked.* Total hours actually worked are a measure of the time an employee is on duty. Total hours paid for are a measure of the total labor time for which an employee would be required to work for his actual pay, were all his hours of work paid for at normal rates. The two will differ if an employee performs overtime work at extra rates. For example, an employee who actually worked 42 hours at regular rates and 2 hours at extra rates of time and one-half is credited not with 44 hours actually worked but with 45 hours for which payment was received (42 hours+2 hours×1.5=45 hours).

As in the case for the industry as a whole, the highest average hourly wages in the drug and medicine branch (58.8 cents) were paid to workers in the Midwest and the lowest average earnings (45.2 cents) were paid to workers in the South.

Toilet preparations branch.—The average hourly earnings of the workers in the toilet preparations branch were only 49.7 cents an hour, 6.9 cents less than the earnings received by workers in the drug and medicine branch, and 4.9 cents an hour less than the average for the total industry. It should be noted that the proportion of female workers found in the toilet preparations branch was higher than in the drug and medicine branch (69.3 percent as compared with 53.1 percent). Since female workers in the industry tended to earn less than male workers, part of the difference in hourly earnings in the two branches can be accounted for on that score.

A difference of fully 14 cents an hour was found to exist between the average hourly wages in the West, the highest wage region (53.5 cents), and the South, the lowest wage region (39.5 cents). In comparing the average hourly wages by regions for the two branches, it was found that the differences ranged from 3.8 cents in the Western region to 8.0 cents an hour in the Midwest. In each region, the average hourly earnings of workers in the drug and medicine branch exceeded the corresponding averages of workers in the toilet preparations branch.

VARIATIONS IN AVERAGE HOURLY EARNINGS, BY SEX

A difference of nearly 20 cents obtained between the average hourly earnings of male and female workers in the total industry. Male workers averaged 65.9 cents per hour and females only 46.3 cents. Differences of similar magnitude in favor of the male workers were found in both the Northeastern and Midwestern regions. The difference was not so marked in the Western region, where the male workers received 12.7 cents an hour more than the female workers. The South, which was the lowest wage region in the industry, showed the smallest difference (9.1 cents) between the earnings of male and female workers.

Drug and medicine branch.—Male workers in the drug and medicine branch earned an average wage of 67.0 cents an hour, while females averaged only 47.4 cents an hour. Both of these averages were about 1 cent higher than those computed for the total industry. The difference in the average earnings of males and females (about 20 cents) was equal to the difference in the earnings of males and females in the entire industry. A similar difference in the hourly earnings of male and female workers also was found in both the Northeastern and Midwestern regions. The difference in favor of male workers was 15.3 cents an hour in the West and only 8.3 cents an hour in the South.

Toilet preparations branch.—Male and female workers in the toilet preparations branch received average hourly earnings of 62.2 and 44.2 cents, respectively. The difference between the average hourly earnings of men and women was thus only slightly lower in the toilet preparations branch than in the drug and medicine branch of the industry. In the Northeastern and Midwestern regions the difference between the average hourly earnings of males and females amounted to 18.5 and 18.4 cents, respectively. The smallest difference between average earnings of males and females in the toilet preparations branch (8.9 cents an hour) was found in the Western rather than in the Southern region. The differential in the South was 13.3 cents.

DISTRIBUTION OF WORKERS BY CLASSIFIED HOURLY EARNINGS

Table 3 presents a simple percentage distribution of the estimated 44,604 workers in the major branches of the industry in May 1940, according to average hourly earnings, by branch of industry and by sex. Individual workers earned from less than 30 cents to over $1.32 an hour. Fully one-half of the workers (50.6 percent) were found within the 20-cent range of 32.5 to 52.5 cents. A negligible number of workers (0.3 percent) earned less than 30 cents, the minimum in effect under the Fair Labor Standards Act. The legal minimum, exactly 30 cents, was earned by 3.8 percent of the workers, while as many as 7.5 percent received exactly 40 cents an hour, the ultimate floor to wages prescribed under the act.

Two characteristics predominated the distribution of hourly earnings of male workers in the total industry: (1) The great range of individual hourly earnings, extending from under 30 cents to over $1.325 an hour; and (2) the bimodal nature of the distribution when classified in 5-cent intervals.

More than one-ninth of the males were in the class of 62.5 and under 67.5 cents. The average hourly earnings of all male workers (65.9 cents) fell within this 5-cent class. Nearly one-tenth (9.7 percent) of the male employees were found in the next largest group—47.5 and under 52.5 cents. There were no marked concentrations of male workers in any of the class intervals under 47.5 cents an hour.

The lower average hourly earnings of all female workers was reflected in the distribution of individual hourly earnings of these employees. The 5-cent wage interval with the greatest concentration of female workers occurred in the wage bracket of 37.5 to 42.5 cents, slightly more than one-fourth of the total female labor force being concentrated in this class. There was a considerable proportion of females (17.6 percent) in the wage class 42.5 and under 47.5 cents.

TABLE 3.—*Percentage Distribution of Estimated Number of Workers According to Average Hourly Earnings, May 1940, by Branch of Industry, and Sex*

Average hourly earnings (in cents)	Total industry			Drug and medicine branch			Toilet preparations branch		
	All workers	Males	Females	All workers	Males	Females	All workers	Males	Females
Under 30.0	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.3
Exactly 30.0	3.8	1.6	5.3	3.6	1.4	5.6	4.1	2.5	4.8
30.1 and under 32.5	1.4	.6	2.0	1.3	.5	1.9	1.8	1.0	2.1
32.5 and under 35.0	2.3	.9	3.3	1.9	.9	2.9	3.2	.9	4.2
35.0 and under 37.5	7.5	1.9	11.6	4.8	1.7	7.6	13.8	2.7	18.7
37.5 and under 40.0	5.8	1.8	8.7	5.4	1.5	8.8	6.8	2.6	8.?
Exactly 40.0	7.5	2.4	11.2	7.4	2.1	12.2	7.6	3.4	9.5
40.1 and under 42.5	4.0	1.5	5.8	3.3	1.3	5.0	5.6	2.3	7.1
42.5 and under 45.0	6.6	2.8	9.4	6.3	2.6	9.5	7.3	3.6	9.1
45.0 and under 47.5	6.5	4.2	8.2	6.2	4.0	8.2	7.1	4.8	8.1
47.5 and under 52.5	10.4	9.7	11.0	10.0	9.0	11.0	11.4	12.8	10.9
52.5 and under 57.5	7.4	8.8	6.4	8.0	8.6	7.4	6.1	9.3	4.6
57.5 and under 62.5	7.1	9.2	5.5	7.9	9.2	6.6	5.3	9.3	3.5
62.5 and under 67.5	6.9	11.5	3.7	7.6	11.2	4.3	5.4	11.6	2.8
67.5 and under 72.5	5.3	9.3	2.4	6.0	9.6	2.8	3.5	7.9	1.6
72.5 and under 77.5	4.4	8.1	1.7	5.0	8.6	1.8	3.0	6.6	1.4
77.5 and under 82.5	3.3	6.5	.9	3.9	7.0	1.2	1.8	4.6	.5
82.5 and under 87.5	2.5	4.7	.9	3.1	5.4	1.1	1.1	2.3	.5
87.5 and under 92.5	2.0	4.2	.5	2.3	4.5	.4	1.4	3.3	.4
92.5 and under 97.5	1.3	2.6	.4	1.6	3.0	.4	.7	1.4	.2
97.5 and under 102.5	1.1	2.3	.2	1.3	2.5	.2	.7	1.7	.2
102.5 and under 112.5	1.0	2.0	.2	1.1	2.0	.3	.8	2.2	.2
112.5 and under 122.5	.7	1.5	.2	.8	1.5	.2	.5	1.2	.2
122.5 and under 132.5	.5	.9	.1	.5	.9	.2	.4	1.1	.1
132.5 and over	.4	.7	.1	.4	.7	.1	.3	.8	(1)
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	44,604	18,780	25,824	31,448	14,737	16,711	13,156	4,043	9,113
Average hourly earnings	$0.546	$0.659	$0.463	$0.566	$0.670	$0.474	$0.497	$0.622	$0.442
Number of plants	1,441			994			447		

[1] Less than a tenth of 1 percent.

A relatively large proportion (11.2 percent) of woman workers earned exactly 40 cents an hour. It is significant that the relative number of females earning less than 40 cents an hour was more than four times as great as the relative number of males in this category (31.2 percent as compared with 7.1).

Drug and medicine branch.—The distribution of workers according to individual hourly earnings in the drug and medicine branch showed a slightly greater proportion of the workers in each of the wage-class intervals above 52.5 cents than was shown in these intervals for the industry as a whole. This was to be expected since the average hourly earnings (56.6 cents) in this branch were 2 cents higher than the average for the industry as a whole. Of the total labor force in the drug and medicine branch, 46.6 percent had earnings falling within the 20-cent range of 37.5 and under 57.5 cents, while roughly one-fourth (26.5 percent) averaged between 57.5 and 77.5 cents per hour. The proportion of workers averaging exactly 30 cents an hour—the effective minimum rate of the Fair Labor Standards Act—was not large (3.6 percent), while roughly twice as many workers (7.4 percent) earned exactly 40 cents.

Toilet preparations branch.—Few workers in the toilet preparations branch received less than 30 cents an hour (0.3 percent), while just over 4 percent received exactly that wage.

In marked contrast to the drug and medicine branch, the distribution of workers according to individual hourly earnings in this branch shows a greater proportion of workers in each of the wage classes falling under 52.5 cents, as compared with the relative distributions in these classes for the industry as a whole. It will be noted that over 7 percent of the workers were reported as receiving exactly 40 cents an hour, and nearly 14 percent of the workers received average hourly earnings in the range of 35 and under 37.5 cents. It is very probable that a substantial majority of the workers reported in this latter class were receiving exactly 35 cents.

SIZE OF PLANT AND AVERAGE HOURLY EARNINGS

In addition to being scattered over most of the United States, establishments in the drug, medicine, and toilet preparations industry varied in size from plants employing only 1 worker to those employing in excess of 1,500 workers. Table 4, which presents the average hourly earnings of workers in the combined industry and in each branch, according to size of plant, groups the plants into 8 size classes.

TABLE 4.—*Average Hourly Earnings, by Size of Plant, Branch of Industry, and Sex, May 1940*

Size of plant	Total industry			Drug and medicine branch			Toilet preparations branch		
	All workers	Males	Females	All workers	Males	Females	All workers	Males	Females
United States	$0.546	$0.659	$0.463	$0.566	$0.670	$0.474	$0.497	$0.622	$0.442
1 to 5 workers	.492	.549	.451	.507	.561	.465	.463	.522	.426
6 to 20 workers	.508	.607	.449	.525	.630	.460	.461	.538	.421
21 to 50 workers	.499	.583	.440	.513	.593	.446	.466	.550	.430
51 to 100 workers	.497	.603	.433	.509	.603	.438	.470	.601	.423
101 to 250 workers	.541	.661	.462	.556	.662	.467	.515	.660	.454
251 to 500 workers	.525	.659	.447	.553	.673	.456	.505	.644	.441
501 to 1,000 workers	.573	.680	.461	.575	.677	.452	.561	.713	.497
1,001 to 2,500 workers	.661	.764	.557	.661	.764	.557	-------	-------	-------

With the presentation of this added detail there appears to be a tendency for the larger plants, i. e., those employing more than 250 workers, to pay higher wages than the smaller plants, and for the plants with greatest employment to pay the highest average hourly wages. For the entire United States, the difference in hourly wages between the smallest plants and the largest plants amounted to 16.9 cents. The difference in hourly earnings of male employees in these two plant groups was large (21.5 cents). The plants which paid the lowest average hourly wages to women employed between 51 and 100

workers. The difference in average hourly earnings of women in these plants and those in the largest plant group was 12.4 cents. The difference in average hourly earnings between the smallest plants and the largest was 10.6 cents.

It is interesting to note that in both the drug and medicine and toilet preparations branches, plants employing between 51 and 100 workers paid their female employees less, on the average, than plants employing only 1 to 5 workers. The differences were not large, varying from less than 3 cents to only 3 mills. Male workers tended to average from 4 to 8 cents more in plants employing 51 to 100 workers than in plants employing 1 to 5 workers.

In the drug and medicine branch of the industry, the over-all difference in the average hourly earnings of workers employed in the smallest and largest plant groups was 15.4 cents. The difference for male employees was 20.3 cents and for female employees, 9.2 cents.

In the toilet preparations branch of the industry, the difference in hourly wages between the smallest plants and largest plants was 9.8 cents. For males the difference was 19.1 cents and for females it was 7.1 cents.

TABLE 5.—*Average Hourly Earnings by Size of Plant, Region, Branch of Industry and Sex, May 1940*

Size of plant	Total industry			Drug and medicine branch			Toilet preparations branch		
	All workers	Males	Females	All workers	Males	Females	All workers	Males	Females
United States	$0.546	$0.659	$0.463	$0.566	$0.670	$0.474	$0.497	$0.622	$0.442
1 to 20 workers	.503	.589	.450	.520	.610	.461	.462	.532	.423
21 to 100 workers	.498	.593	.436	.511	.598	.442	.468	.576	.426
101 to 250 workers	.541	.661	.462	.556	.662	.467	.515	.660	.454
251 to 2,500 workers	.582	.702	.482	.606	.713	.498	[1].513	[1].654	[1].450
Northeastern region	.538	.654	.452	.562	.664	.460	.497	.626	.441
1 to 20 workers	.524	.624	.453	.536	.654	.465	.475	.551	.430
21 to 100 workers	.506	.609	.440	.519	.613	.444	.479	.595	.434
101 to 250 workers	.548	.681	.459	.586	.689	.480	.508	.668	.443
251 to 2,500 workers	.551	.668	.455	.580	.679	.463	[1].501	[1].634	[1].445
Midwestern region	.574	.691	.487	.588	.700	.497	.508	.634	.450
1 to 20 workers	.491	.565	.449	.507	.585	.463	.442	.503	.409
21 to 100 workers	.493	.591	.426	.507	.595	.431	.454	.570	.416
101 to 250 workers	.534	.642	.463	.534	.640	.454	.534	.649	.486
251 to 2,500 workers	.645	.772	.538	.651	.774	.544	[1].587	[1].746	[1].486
Southern region	.442	.499	.408	.452	.503	.420	.395	.481	.348
1 to 20 workers	.417	.455	.393	.415	.435	.402	.424	.516	.362
21 to 100 workers	.429	.471	.405	.453	.477	.438	.378	.456	.340
101 to 1,000 workers	.468	.547	.419	.468	.547	.419			
Western region	.557	.636	.509	.573	.667	.514	.535	.592	.503
1 to 20 workers	.563	.662	.508	.600	.697	.527	.495	.540	.481
21 to 250 workers	.552	.619	.510	.548	.633	.503	.555	.607	.518

[1] There is no plant employing over 1,000 workers for the toilet preparations branch.

To study further the relationship between size of plant and average hourly earnings, the plants in each region were combined into 4 size classes, i. e., those employing 1 to 20 workers; those employing 21 to 100 workers; those employing 101 to 250 workers; and those employ-

ing 251 to 2,500 workers (table 5). The greatest difference in average hourly earnings among the several plant size groups was in the Midwest where the largest size plants (251 to 2,500 workers) paid an average wage which was 15 cents an hour more than plants employing 1 to 20 workers (64.5 cents as against 49.1 cents). The differences in average hourly earnings in the other regions were smaller, ranging roughly from 1 to 5 cents. Although a number of exceptions may be noted, workers in the larger plants tended to earn more than workers in small plants. Regardless of plant size, males earned more on the average than females.

Average Hourly Earnings in Subsidiary Branches of the Industry

In the introduction to this study, it was pointed out that certain of the questionnaire returns could not be grouped with the majority of returns. Although the plants represented by these returns manufactured products of the industry as defined by the Administrator, they did not fall within either of the major branches which have been discussed. It was not possible to weight the returns of these establishments. The information that was supplied, however, was segregated and analyzed separately in its unweighted form. The unweighted data were divided into four classifications.[7] The percentage distribution according to average hourly earnings is shown, by sex, in table 6 for each of the four classifications.

Combined product manufacturers.—Usable questionnaires were received from 10 combined product manufacturers. These 10 establishments employed 407 workers of whom about 30 percent (125) were males and about 70 percent (282) females. Average employment, therefore, was about 40. In the plants employing between 21 and 50 workers in the major branches of the industry, about 40 percent of the employees were males and 60 percent females.

The average hourly earnings in the plants of combined product manufacturers were 46.4 cents an hour, male workers averaging 58.3 cents and females 41.1 cents. These hourly earnings were slightly below the earnings of employees in plants which employed between 21 and 50 employees in the major branches of the industry.

No less than 13 percent of the employees of combined product manufacturers received exactly 30 cents. Fully 44.1 percent received under 40 cents per hour.

Manufacturers of drugs, medicines, and toilet preparations as a minor product.—Questionnaires were received from 103 plants which produced products of the industry as less than 50 percent of their 1939 sales. The employment in these plants was 5,381, the average plant employing about 50 workers. About 55 percent of the employees were males and 45 percent females. Average earnings in these

[7] For definitions of these classifications, see paragraphs 3 to 6, pp. 988–989.

plants were 62.7 cents per hour. Only 15 percent of the workers earned less than 40 cents.

Manufacturing departments of distributors.—In all, 73 manufacturing departments of plants engaged in distributing the products of the industry returned usable questionnaires. These firms employed 893 workers, of whom 430 were males and 463 females.

Male employees engaged in manufacturing divisions of these distributing firms earned an average of 60.2 cents, while female workers averaged only 38.2 cents, and the average hourly earnings of all employees amounted to 48.8 cents an hour.

Central administrative offices.—Questionnaires were received from 26 central administrative offices of firms engaged in the manufacture of products of the industry. These 26 establishments employed 2,250 workers, of whom 630 were males and 1,620 females. The central offices, therefore, employed on the average more than 85 workers. The average hourly earnings of these workers tended to be about 10 cents an hour higher than the average earnings of workers in the major branches of the industry. The average hourly earnings of males were 78.9 cents an hour and for females, 61.6 cents an hour.

TABLE 6.—*Percentage Distribution of Workers in Subsidiary Branches of the Industry, May 1940, by Average Hourly Earnings and Sex*

Average hourly earnings (in cents)	Combined products manufacturers			Manufacturing drugs, medicines, and toilet preparations as minor products			Manufacturing departments of distributors			Central administrative offices		
	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
Under 30.0	------	------	------	0.4	0.3	0.5	0.1	0.2	------	0.1	0.2	0.1
Exactly 30.0	13.0	0.8	18.4	3.0	1.0	5.6	7.8	3.0	12.4	------	------	------
30.1 and under 32.5	1.0	------	1.4	.9	.2	1.8	6.5	1.9	10.8	.1	.3	------
32.5 and under 35.0	3.7	------	5.3	2.1	.8	3.8	7.1	.9	12.7	.1	.3	.1
35.0 and under 37.5	16.7	4.0	22.2	3.7	.8	7.5	8.6	3.5	13.5	2.5	1.3	3.0
37.5 and under 40.0	9.8	1.6	13.5	4.9	.8	10.3	7.4	1.6	12.7	2.6	1.4	3.0
Exactly 40.0	5.2	4.0	5.7	3.0	2.1	4.0	.8	.9	.6	4.2	.6	5.6
40.1 and under 42.5	3.9	2.4	4.6	2.4	.7	4.6	5.8	1.4	9.9	2.0	.8	2.5
42.5 and under 45.0	3.7	3.2	3.9	4.3	2.5	6.7	6.5	2.8	9.9	3.4	2.5	3.8
45.0 and under 47.5	8.1	7.2	8.5	3.5	2.2	5.3	7.2	4.0	10.2	6.7	4.4	7.5
47.5 and under 52.5	10.1	19.2	6.0	10.2	6.8	15.1	6.3	8.4	4.3	12.0	8.8	13.2
52.5 and under 57.5	5.7	14.4	1.8	10.3	11.8	8.4	9.1	18.1	.9	10.1	6.8	11.4
57.5 and under 62.5	3.9	8.0	2.1	7.8	8.9	6.4	6.8	12.8	1.3	9.1	9.0	9.1
62.5 and under 67.5	2.9	7.2	1.1	6.8	6.9	6.6	6.5	12.8	.6	9.2	7.6	9.8
67.5 and under 72.5	3.2	8.8	.7	8.7	10.8	5.9	4.7	9.5	.2	8.0	7.1	8.3
72.5 and under 77.5	2.7	8.0	.4	5.5	7.6	2.7	1.6	3.3	------	4.5	4.9	4.4
77.5 and under 82.5	1.5	.8	1.8	4.9	7.9	1.0	1.1	2.3	------	4.2	3.8	4.4
82.5 and under 87.5	1.7	3.2	1.1	3.3	4.9	1.0	4.1	8.6	------	4.5	6.0	4.0
87.5 and under 92.5	1.2	3.2	.4	3.0	4.7	.8	.7	1.4	------	2.6	4.1	2.0
92.5 and under 97.5	.5	.8	.4	1.9	3.0	.4	.7	1.4	------	2.7	4.0	2.2
97.5 and under 102.5	1.0	1.6	.7	1.9	3.2	.2	[1].6	[1] 1.2	------	2.1	3.8	1.4
102.5 and under 112.5	[2].5	[2] 1.6	------	3.5	5.8	.5	------	------	------	2.8	5.9	1.5
112.5 and under 122.5	------	------	------	1.6	2.6	.3	------	------	------	3.2	7.8	1.4
122.5 and under 132.5	------	------	------	1.2	1.8	.3	------	------	------	1.4	4.0	.4
132.5 and over	------	------	------	1.2	1.9	.3	------	------	------	1.9	4.6	.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of workers	407	125	282	5,381	3,059	2,322	893	430	463	2,250	630	1,620
Average hourly earnings	$0.464	$0.583	$0.411	$0.627	$0.723	$0.501	$0.488	$0.602	$0.382	$0.664	$0.789	$0.616
Number of plants	10	------	------	103	------	------	73	------	------	26	------	------

[1] 97.5 cents and over.

[2] 102.5 cents and over.

WAGES IN NORWAY, 1934 TO 1939–40

THERE is in Norway a well-developed and unified system of labor unions and employers' associations,[1] with a record of peaceful negotiations, especially during recent years. As a result of their collective bargaining, money wages of the industrial and trade workers showed a steady increase from 1934 to 1939. Hourly wages rose by about 30 øre,[2] daily wages by about 2.50 kroner, and monthly wages by about 12 kroner during this period.[3]

Official figures showing the wage rates, hourly, daily, and weekly, in Norwegian industries and trades, in the period 1934–39, inclusive,[4] are shown in table 1.

TABLE 1.—*Wages in Industries and Trades in Norway, 1934, 1937, and 1939*

Industry and occupation	Average wages (in kroner)			Industry and occupation	Average wages (in kroner)		
	1934	1937	1939		1934	1937	1939
	Hourly rates				Weekly rates		
Metal industry:							
Skilled workers	1.38	1.63	1.79	Carpenters	68.00	76.00	83.00
Helpers	1.14	1.31	1.44	Masons	73.00	81.00	86.00
Mining industry	1.11	1.32	1.46	Masons' helpers	66.00	75.00	81.00
Public works:				Painters	70.00	78.00	84.00
Highway workers:				Bakers	69.00	72.00	79.00
Piece rate	1.51	1.77	1.86	Shoemakers	55.00	59.00	62.00
Time rate	1.20	1.40	1.48	Tailors	62.00	67.00	71.00
Telegraph workers:				Cement workers	65.00	73.00	80.00
Piece rate	1.05	1.28	1.39	Carters	54.00	70.00	71.00
Time rate	1.03	1.17	1.31	Laundresses	28.00	36.00	38.00
Road construction:							
Piece rate	1.00	1.12	1.30		Monthly rates		
Time rate	.87	.97	1.10				
Port construction:							
All workers:				Domestic servants, female,[2] aged—			
Piece rate	1.18	1.24	1.42	17 to 19 years	26.00	-------	35.00
Time rate	.90	1.10	1.17	20 to 24 years	33.00	-------	43.00
Skilled workers:				25 to 54 years	40.00	-------	49.00
Piece rate	-------	1.43	1.70				
Time rate	-------	1.38	1.47				
	Daily rates						
Workers, export industries	10.83	11.79	12.95				
Workers, other	11.20	12.46	13.91				
Handicraftsmen	13.50	15.57	17.65				
Cleaners, female[1]	4.70	5.00	5.60				

[1] With board.
[2] With board and lodging.

Table 2 shows the wages paid to agricultural workers in Norway in 1934 and 1939–40. On an average, the seasonal wages approximately increased by 96 kroner in summer, and 82 kroner in winter,

[1] The membership of the unified labor unions rose to 352,479 in 1939 as compared with 172,513 in 1934. The employers' association covered 3,246 establishments with 129,800 workers in 1940, as compared with 2,902 establishments with 113,160 workers in 1938.

[2] Average exchange rate of krone (100 øre) in 1939=23.2 cents.

[3] For an approximation of the movement of real wages during the years under review, see Monthly Labor Review for August 1940 (p. 405): Trend of Cost of Living in Norway, 1938–40.

[4] Statistiske Sentralbyrå. Statistisk Årbok for Norge. Oslo, 1940.

in 1939–40 over those in 1934; the daily wages in summer increased by about 1 krone, and in winter by about 1.50 kroner in 1939–40 over those in 1934.

TABLE 2.—*Wages in Agriculture in Norway in 1934 and 1939–40*

Group of workers		Summer		Winter	
		1934	1939	1934–35	1939–40
Laborers receiving board:					
Males		*Kroner*	*Kroner*	*Kroner*	*Kroner*
Sowing season	Per day	2.70	4.01		
Haymaking season	do	3.07	4.61		
Harvesting season	do	2.69	4.12		
Others	do	2.48	3.80	2.10	3.33
Females:					
Sowing season	do	1.74	2.53		
Haymaking season	do	1.95	2.79		
Harvesting season	do	1.85	2.70		
Others	do	1.61	2.39	1.42	2.16
Laborers not receiving board:					
Males:					
Sowing season	do	3.92	5.55		
Haymaking season	do	4.27	6.05		
Harvesting season	do	3.95	5.65		
Others	do	3.70	5.32	3.28	4.87
Females:					
Sowing season	do	2.68	3.68		
Haymaking season	do	2.89	3.89		
Harvesting season	do	2.79	3.82		
Others	do	2.56	3.56	2.32	3.27
Excavators receiving board	do	4.14	5.89	3.61	5.36
Excavators not receiving board	do	5.44	7.59	4.84	7.02
Carpenters receiving board	do	4.39	6.14	3.72	5.64
Carpenters not receiving board	do	5.79	7.92	5.06	7.35
Domestic servants receiving board and lodging:					
Males	6-month period	240.00	358.00	176.00	279.00
Females	do	161.00	226.00	134.00	195.00

INCREASED WAGES FOR WOOLEN AND RAYON WORKERS IN PERU, 1940 AND 1941 [1]

FOLLOWING an investigation by the Bureau of Labor and Social Welfare of Peru, the Government granted temporary wage increases for workers in the woolen- and rayon-textile industries in the Province of Lima, by decrees of December 19, 1940, and January 13, 1941, pending a final adjustment by a commission to be appointed for the purpose.

In the woolen-textile industry, the pay of job or piece workers was increased 10 percent. Certain exceptions were made in the case of job workers whose income had been increased by the arbitration award of June 1, 1939. Wages of persons receiving less than 2.00 soles [2] a day were increased by 40 percent; from 2.00 to 2.99 soles, by 30 percent; from 3.00 to 3.99 soles, by 20 percent; from 4.00 to 5.99 soles, by 10 percent; and from 6.00 to 9.99 soles, by 5 percent. If, because of these increases, the wages of one group should be less

[1] Data are from reports of Julian Greenup, United States commercial attaché at Lima, Peru.

[2] The Peruvian sol (100 centavos) has recently been maintained at a value equal to about 15.4 cents in U. S. currency.

than those of a lower wage class, the wages of the former are increased to a figure 10 centavos above the lower wage class.

In the rayon branch of the textile industry, the increase for job workers was 8 percent, while the advances in the wage schedule up to 3.99 soles were the same as for the workers in the woolen mills. A 10-percent increase was allowed for the wage groups from 4.00 to 4.99 soles. The increases were made retroactive to August 1, 1940.

WAGE INCREASE UNDER GENERAL COLLECTIVE AGREEMENT IN SWEDEN [1]

THE Swedish Federation of Labor on January 9, 1941, concluded a new agreement with the Swedish Employers' Association.

The agreement provides for a sliding scale of wage increases during 1941, along lines similar to those contained in the agreement which expired at the end of 1940. The main difference is that instead of an increase equal to 75 percent of the rise in the cost-of-living index each quarter, the increase for 1941 will be only half of the rise in the cost of living, and it will be calculated only every half year. One condition made in the agreement stipulated that no increase in wages would be paid unless the cost-of-living index exceeded 200 for the fourth quarter of 1940.

As the cost-of-living index, computed by the Social Board and published on January 10, 1941, stood at 204 (as against 197 for the third quarter of 1940), some 600,000 workers and employees covered by the new agreement will obtain an increase equal to 4 percent of their wages in addition to the increases paid in 1940. The increase, in the case of wage earners, will be paid as from February 1, 1941, and in the case of salaried employees, from January 1, 1941. Salaried employees will receive no increase on that part of salaries in excess of 900 kronor [2] a month.

Another provision in the new agreement states that if the cost-of-living index as of July 1, 1941, reaches 212, another increase of 4 percent will become payable.

[1] Report of F. A. M. Alfsen, United States commercial attaché, Stockholm, Sweden.

[2] Average exchange rate of krona in November 1940=24 cents.

Building Operations

SUMMARY OF BUILDING CONSTRUCTION IN PRINCIPAL CITIES, FEBRUARY 1941 [1]

FEBRUARY building activity as measured by the value of permits issued declined 4.6 percent from the January level. New residential construction showed a decrease of only 0.5 percent from the preceding month. The sharpest decline occurred in nonresidential construction where February permit valuations were 11.1 percent below the January figure. Additions, alterations, and repairs to existing structures, however, increased 0.3 percent from January to February.

As compared with February 1940, however, permit valuations for all classes of building construction combined showed a gain of 21.6 percent. New residential construction registered a gain of 9.2 percent over the year period and new nonresidential construction increased 62.3 percent. Additions, alterations, and repairs to existing structures declined 3.1 percent.

Comparison of February 1941 with January 1941 and February 1940

A summary of building construction in 2,185 identical cities in February 1941, with percentage changes from January 1941 and February 1940, is given in table 1.

TABLE 1.—*Summary of Building Construction for Which Permits Were Issued in 2,185 Identical Cities, February 1941*

Class of Construction	Number of buildings			Permit valuation		
	February 1941	Percentage change from—		February 1941	Percentage change from—	
		January 1941	February 1940		January 1941	February 1940
All construction	44,982	−1.7	+0.5	$173,747,745	−4.6	+21.6
New residential	15,738	−1.7	−1.4	86,830,315	−.5	+9.2
New nonresidential	6,501	−9.8	+.4	63,211,761	−11.1	+62.3
Additions, alterations, and repairs	22,743	+.9	+2.0	23,705,669	+.3	−3.1

[1] More detailed information by geographic division and individual cities is given in a separate pamphlet entitled "Building Construction, February 1941," copies of which will be furnished upon request.

A summary of permit valuations and the number of family-dwelling units provided in new dwellings in 2,185 identical cities, having a population of 500 and over, is shown in table 2 for February 1941 with percentage changes from January 1941 and February 1940.

TABLE 2.—*Number and Permit Valuation of New Dwelling Units in 2,185 Identical Cities, by Type of Dwelling, February 1941*

Type of dwelling	Permit valuation			Number of dwelling units		
	February 1941	Percentage change from—		February 1941	Percentage change from—	
		January 1941	February 1940		January 1941	February 1940
All types	$86,137,118	−0.8	+8.9	24,193	−0.5	+6.6
1-family	55,685,046	−4.5	+2.7	13,977	−4.6	−4.2
2-family [1]	3,390,682	+15.3	−13.8	1,358	+11.3	−19.4
Multifamily [2]	27,061,390	+5.8	+29.3	8,858	+4.9	+37.7

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

Construction During First 2 Months, 1940 and 1941

Cumulative totals for the first 2 months of 1941 compared with the same months of the preceding year are shown in table 3. The data are based on reports received from cities having a population of 500 and over.

TABLE 3.—*Permit Valuation of Building Construction, by Class of Construction, Reporting Cities of 500 Population and Over, First 2 Months, 1940 and 1941*

Class of construction	Permit valuation of building construction, first 2 months of—		Percentage change
	1941	1940	
All construction	$351,960,371	$263,243,497	+33.7
New residential	179,421,542	141,982,171	+26.4
New nonresidential	125,267,093	76,185,594	+64.4
Additions, alterations, and repairs	47,271,736	45,075,732	+4.9

Table 4 presents the permit valuation and number of family-dwelling units provided in cities with a population of 500 and over, for the first 2 months of 1940 and 1941.

TABLE 4.—*Number and Permit Valuation of New Dwelling Units, by Type of Dwelling, First 2 Months of 1940 and 1941* [1]

Type of dwelling	Permit valuation, first 2 months of—		Percentage change	Number of dwelling units, first 2 months of—		Percentage change
	1941	1940		1941	1940	
All types	$178,246,445	$140,743,924	+26.6	50,306	40,090	+25.5
1-family	114,250,128	93,612,208	+22.0	28,701	24,955	+15.0
2-family [2]	6,977,747	6,456,429	+8.1	2,847	2,756	+3.3
Multifamily [3]	57,018,570	40,675,287	+40.2	18,758	12,379	+51.5

[1] Based on reports from cities with a population of 500 and over, the cities being identical for any given month of both years.
[2] Includes 1- and 2-family dwellings with stores.
[3] Includes multifamily dwellings with stores.

Analysis by Size of City, February 1941

Table 5 shows the value of permits issued for building construction in February 1941 with percentage changes from January 1941 and February 1940, by size of city and by class of construction.

TABLE 5.—*Permit Valuation of Various Classes of Building Construction in 2,185 Identical Cities, by Size of City, February 1941*

Size of city	Number of cities reporting	Total construction			New residential buildings		
		Permit valuation, February 1941	Percentage change from—		Permit valuation, February 1941	Percentage change from—	
			January 1941	February 1940		January 1941	February 1940
Total, all reporting cities	2,185	$173,747,745	−4.6	+21.6	$86,830,315	−0.5	+9.2
500,000 and over	14	44,493,440	−16.4	−17.8	27,162,060	−12.3	−9.6
100,000 and under 500,000	78	48,327,943	+4.1	+45.9	24,181,939	+20.2	+39.0
50,000 and under 100,000	103	24,207,158	+43.9	+39.1	6,881,165	−2.4	−24.2
25,000 and under 50,000	192	25,837,540	+45.7	+114.9	10,075,549	+10.2	+48.2
10,000 and under 25,000	472	17,255,526	−50.4	+14.2	10,559,147	−7.1	+14.0
5,000 and under 10,000	435	6,728,951	−11.5	−1.7	4,555,950	−8.2	+.9
2,500 and under 5,000	457	5,547,020	+31.8	+77.2	2,624,234	−8.3	+42.9
1,000 and under 2,500	[1] 434	1,350,167	+10.2	+14.0	790,271	−2.9	+25.2

Size of city	New nonresidential buildings			Additions, alterations, and repairs			Population (census of 1940)
	Permit valuation, February 1941	Percentage change from—		Permit valuation, February 1941	Percentage change from—		
		January 1941	February 1940		January 1941	February 1940	
Total, all reporting cities	$63,211,761	−11.1	+62.3	$23,705,669	+0.3	−3.1	64,612,739
500,000 and over	8,515,862	−36.6	−40.5	8,815,518	−.3	−9.9	22,367,825
100,000 and under 500,000	18,490,792	−9.5	+73.4	5,655,212	−3.6	+11.9	15,620,164
50,000 and under 100,000	14,096,755	+103.0	+138.1	3,229,238	+14.0	+34.6	7,112,357
25,000 and under 50,000	13,603,396	+124.3	+593.4	2,158,595	−14.6	−33.9	6,733,985
10,000 and under 25,000	4,364,197	−79.5	+28.0	2,332,182	+10.3	−4.6	7,319,669
5,000 and under 10,000	1,437,061	−22.7	−0.1	735,940	−5.6	−17.8	3,080,205
2,500 and under 5,000	2,400,407	+192.5	+194.3	522,379	−1.1	+9.4	1,647,176
1,000 and under 2,500	303,291	+17.8	−28.2	256,605	+67.0	+95.7	731,358

[1] Includes 6 cities having a population of less than 1,000.

The permit valuation and number of new dwelling units provided, by type of dwelling and size of city, in the 2,185 identical cities reporting for January and February 1941, are given in table 6.

TABLE 6.—*Number and Permit Valuation of New Dwelling Units in 2,185 Identical Cities, by Size of City and Type of Dwelling, February 1941*

Size of city	Permit valuation of housekeeping dwellings			Number of families provided for in—							
				All types		1-family dwellings		2-family dwellings [1]		Multifamily dwellings [2]	
	February 1941	January 1941	Percentage change	February 1941	January 1941	February 1941	January 1941	February 1941	January 1941	February 1941	January 1941
Total, all reporting cities	$86,137,118	$86,802,187	−0.8	24,193	24,309	13,977	14,696	1,358	1,220	8,858	8,443
500,000 and over	27,119,060	30,700,528	−11.7	7,137	8,368	3,309	3,369	478	337	3,350	4,662
100,000 and under 500,000	24,155,539	20,106,946	+20.1	7,269	5,874	3,451	3,536	355	465	3,463	1,873
50,000 and under 100,000	6,826,240	6,996,768	−2.4	2,116	2,092	1,465	1,536	243	182	408	374
25,000 and under 50,000	9,584,649	9,135,253	+4.9	2,686	2,587	1,612	1,876	94	69	980	642
10,000 and under 25,000	10,530,797	11,258,383	−6.5	2,862	3,156	2,184	2,277	118	90	560	789
5,000 and under 10,000	4,514,878	4,950,439	−8.8	1,214	1,274	1,111	1,206	35	43	68	25
2,500 and under 5,000	2,615,684	2,840,775	−7.9	711	735	656	628	29	29	26	78
1,000 and under 2,500 [3]	790,271	813,095	−2.8	198	223	189	218	6	5	3	0

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.
[3] Includes 6 cities having a population of less than 1,000.

The information on building permits issued is based on reports received by the Bureau of Labor Statistics from 2,185 identical cities having a population of 500 and over.

The information is collected by the Bureau of Labor Statistics from local building officials, except in the States of Illinois, Massachusetts, New Jersey, and Pennsylvania, where the State departments of labor collect and forward the information to the Bureau. In New York and North Carolina the information from the smaller cities is collected by the Bureau of Labor Statistics from local building officials and the information from the larger cities is collected and forwarded to the Bureau by the State departments of labor. The permit valuations shown in this report are estimates made by prospective builders on applying for permits to build. No land costs are included. Only building projects within the corporate limits of the cities enumerated are included in the Bureau's tabulation. The data collected by the Bureau of Labor Statistics show, in addition to private and municipal construction, the value of buildings for which contracts were awarded by the Federal and State governments in the cities included in the report. For February 1941 the value of these buildings amounted to $42,573,000, for January 1941 to $37,933,000, and for February 1940 to $23,337,000.

Construction From Public Funds

The value of contracts awarded and force-account work started during February 1941, January 1941, and February 1940 on construction projects financed wholly or partially from various Federal funds is shown in table 7.

TABLE 7.—*Value of Contracts Awarded and Force-Account Work Started on Construction Projects Financed From Federal Funds, January and February 1941 and February 1940* [1]

Federal agency	Contracts awarded and force-account work started		
	February 1941	January 1941 [2]	February 1940 [2]
Total	$173,466,185	$185,404,596	$67,363,863
Public Works Administration:			
Federal	3,900	47,430	115,634
Non-Federal:			
N. I. R. A.	0	773,806	108,320
E. R. A. A.	0	0	458,997
P. W. A. A., 1938	0	1,333,515	7,805,159
Federal agency projects under the WPA	28,523	82,110	244,242
Regular Federal appropriations	160,366,471	172,997,257	46,196,305
United States Housing Authority	13,067,291	10,170,478	12,435,206

[1] Preliminary, subject to revision.
[2] Revised.

The value of public-building and highway construction awards financed wholly from appropriations from State funds, as reported by the various State governments for February 1941, January 1941, and February 1940, is shown in the following statement:

	Public buildings	Highway construction
February 1941	$954,165	$2,984,882
January 1941	1,813,247	7,049,354
February 1940	3,545,740	7,877,956

NEW DWELLING UNITS IN NONFARM AREAS DURING 1940

Summary

BUILDINGS upon which construction was started in nonfarm areas during 1940 were designed to accommodate approximately 540,000 families. This estimate, based upon building-permit reports, represents an increase of 16 percent over 1939. The last previous year with more new dwelling units was 1928, when an estimated total of 753,000 family accommodations were provided.

Both privately and publicly financed dwellings showed gains over 1939, privately financed units increasing 14 percent, and publicly financed units 30 percent. Projects designed for defense housing pur-

poses contributed 23,785 units to the 73,533 family aggregate of 1940 public projects. United States Housing Authority projects for which construction contracts were awarded in 1940 contained facilities for 51,345 families as compared with 56,302 units in 1939 projects.

The 540,000 new units provided in nonfarm areas during 1940 are estimated to have a permit valuation of $1,847,000,000. Included in this total are $225,000,000 public funds allocated for construction of low-rent and defense housing projects.

Scope of Report

The "nonfarm area" of the United States can, in general, be defined as consisting of all urban and rural nonfarm places. The urban group includes all incorporated places with a population of 2,500 or more and also a small group of towns specially classified as urban. Incorporated places of less than 2,500 population, as well as unincorporated areas excluding farms, are designated as "rural nonfarm." The classifications used here and also the groupings by size of city are based upon the 1930 census. Beginning with the first quarter of 1941, these data will be classified in accord with the census of 1940.

The estimates of new dwelling units presented are derived from a large sample of building-permit reports. The Bureau of Labor Statistics began collecting such data as early as 1920, at first including only the larger cities. Since then the coverage of the sample has been steadily expanded until it now includes more than 2,300 cities of 1,000 population or over. In addition to this sample of cities, a small number of counties has since 1939 been submitting reports of building permits issued on their unincorporated areas. An attempt is being made to add to the reporting sample incorporated places as small as 500 population and also a larger number of counties. Lack of information regarding construction of dwelling facilities on farms is the reason for restriction of the present estimates to nonfarm areas.

The estimates for 1940 and 1939 include revisions of data presented in previous issues of the Monthly Labor Review.[1] Annual estimates for years from 1936 on are a continuation by the Bureau of Labor Statistics of the series established by the National Bureau of Economic Research,[2] which also based its work on building-permit data. It is of importance to note that building permits are issued when construction work is about to start. Therefore, estimates derived from permits represent future dwelling-unit capacity of buildings upon which construction was started in the period specified.

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[1] August and October 1940, January 1941.

[2] National Bureau of Economic Research, Bulletin No. 65: Nonfarm Residential Construction, 1920-36, Washington, 1937.

New Dwellings, 1920–40

With 540,000 new dwelling units provided for nonfarm families, residential construction during 1940 continued its upward climb of the last 5 years. The 1940 total is more than twice the annual average of 220,000 units for the preceding decade, but falls short of the 703,000 average for the decade of the 1920's. The last year of greater activity was 1928, when new family accommodations totaled 753,000 units. From that point it dropped to 509,000 in 1929 and then fell to a depression low of 54,000 units in 1933.

The recovery in residential construction is even more marked when 1-family dwellings alone are considered. Of the units provided in 1940, 425,000 were of the 1-family type, a number which compares favorably with the 436,000 1-family units built in 1928. Trends in 2-family and multifamily units do not follow closely movements in volume of new 1-family houses. Thus although recovery in construction of 1-family dwellings has proceeded so well, 1940 totals for 2-family and apartment units are still less than half the comparable 1928 figures. The great fluctuations from year to year in number of new dwelling units provided in nonfarm areas since 1920 are shown in table 1.

TABLE 1.—*Number of New Dwelling Units in Nonfarm Areas, 1920 to 1940* [1]

Year	Total nonfarm	Area		Type of dwelling		
		Urban	Rural nonfarm	1-family	2-family [2]	Multi-family [3]
1920	247,000	196,000	51,000	202,000	24,000	21,000
1921	449,000	359,000	90,000	316,000	70,000	63,000
1922	716,000	574,000	142,000	437,000	146,000	133,000
1923	871,000	698,000	173,000	513,000	175,000	183,000
1924	893,000	716,000	177,000	534,000	173,000	186,000
1925	937,000	752,000	185,000	572,000	157,000	208,000
1926	849,000	681,000	168,000	491,000	117,000	241,000
1927	810,000	643,000	167,000	454,000	99,000	257,000
1928	753,000	594,000	159,000	436,000	78,000	239,000
1929	509,000	400,000	109,000	316,000	51,000	142,000
1930	286,000	224,000	62,000	185,000	28,000	73,000
1931	212,000	164,000	48,000	147,000	21,000	44,000
1932	74,000	56,000	18,000	61,000	6,000	7,000
1933	54,000	40,000	14,000	39,000	4,000	11,000
1934	55,000	41,000	14,000	42,000	3,000	10,000
1935	144,000	106,000	38,000	110,000	6,000	28,000
1936	276,000	199,000	77,000	203,000	13,000	60,000
1937	286,000	205,000	81,000	219,000	15,000	52,000
1938	347,000	246,000	101,000	261,000	17,000	69,000
1939	465,000	342,000	123,000	351,000	28,000	86,000
1940	540,000	386,000	154,000	425,000	37,000	78,000

[1] Data for 1920–35 are from National Bureau of Economic Research, data for 1936–40 from Bureau of Labor Statistics.
[2] Includes 1- and 2-family dwellings with stores.
[3] Includes multifamily dwellings with stores.

New Dwelling Units, 1940

The 540,000 new units provided during 1940 represent an increase of 16 percent over the 465,000 provided during 1939. The year

started rather slowly, first quarter totals showing only a 4-percent increase over the corresponding quarter of 1939, whereas privately financed units alone showed a small decrease. However, second, third, and fourth quarters showed increases of 12, 21, and 25 percent, respectively, over the corresponding periods of 1939.

The 1940 peak was reached in the third quarter with a total of 151,000 new units. Publicly financed projects for more than 34,000 families forced the fourth quarter total up to 147,000 units, only slightly smaller than the total for the preceding quarter. According to normal seasonal patterns, more residential construction is expected to be started in the second quarter of the year than in any other period, with the third quarter next in activity. During 1940, the second quarter ranked behind the last two periods. New dwelling units provided in nonfarm areas during each quarter of 1940 and 1939 are shown in table 2.

TABLE 2.—*Number of New Dwelling Units in Nonfarm Areas, 1939 and 1940, by Quarters and Source of Funds*

Period	Number of units financed from specified sources					
	Total		Private funds		Public funds	
	1940	1939	1940	1939	1940	1939
Year	540,000	465,000	466,467	408,458	73,533	56,542
Percent of change, 1940 as compared with 1939	+16.1		+14.2		+30.1	
First quarter	99,322	95,354	88,907	90,538	10,415	4,816
Second quarter	143,427	128,157	132,426	113,436	11,001	14,721
Third quarter	150,634	124,265	132,896	106,339	17,738	17,926
Fourth quarter	146,617	117,224	112,238	98,145	34,379	19,079

Although 1- and 2-family dwellings made great gains during 1940 as compared with 1939, units in new apartments in the nonfarm area showed a decrease of nearly 8,000 units, or 9 percent. The 1-family type, with 73,000 more new units, increased 21 percent, and the 2-family type, 33 percent. For privately financed units alone, the 1- and 2-family types were 19 and 38 percent greater, respectively; the multifamily type, 14 percent smaller.

Except for cities of over 500,000 population, all urban population groups, and the rural nonfarm group as well, shared in the increase from 1939 to 1940. Of the urban groups, the most important gains were made in cities of population between 100,000 and 500,000 and between 10,000 and 25,000. In cities of 500,000 and over, the upward trends in 1- and 2-family units were overweighted by the 11,000 drop in apartment units. A contributing cause of this drop was the fact that applications filed by private persons for permits in New York City during 1940 provided for 19,835 apartment units, 9,478 fewer than in 1939. In table 3 are presented the estimates for 1939 and 1940 by population group and type of dwelling.

TABLE 3.—*Number of New Dwelling Units in Nonfarm Areas, 1939 and 1940, by Population Group and Type of Dwelling*

Population group	All types		1-family		2-family [1]		Multifamily [2]	
	1940	1939	1940	1939	1940	1939	1940	1939
Total nonfarm	540,000	465,000	425,103	351,641	36,865	27,655	78,032	85,704
Percent of change, 1940 as compared with 1939	+16.1		+20.9		+33.3		−9.0	
Total urban	385,878	342,107	284,564	237,268	30,925	23,737	70,389	81,102
500,000 population and over	100,016	104,676	51,231	47,900	7,639	4,509	41,146	52,267
100,000–500,000 population	85,931	72,239	61,338	49,690	9,863	8,614	14,730	13,935
50,000–100,000 population	31,088	28,067	24,939	21,849	3,141	3,211	3,008	3,007
25,000–50,000 population	38,442	31,221	32,123	25,440	3,744	2,572	2,575	3,209
10,000–25,000 population	60,329	48,252	53,015	41,363	3,644	2,577	3,670	4,312
5,000–10,000 population	39,084	32,018	33,409	27,600	1,691	1,216	3,984	3,202
2,500–5,000 population	30,988	25,634	28,509	23,426	1,203	1,038	1,276	1,170
Rural nonfarm	154,122	122,893	140,539	114,373	5,940	3,918	7,643	4,602

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

The Pacific, South Atlantic, and East North Central States with 102,000, 101,000, and 93,000 new homes, respectively, exceeded the totals for other divisions, and also made the most important gains over the preceding year. An estimate of 10,000 fewer new homes in 1940 than in 1939 dropped the Middle Atlantic States from first rank in 1939 to fourth in 1940. All other geographic divisions showed gains in 1940 as compared with 1939.

Of the 540,000 new units in nonfarm areas during 1940, 79 percent were 1-family; 7 percent, 2-family; and 14 percent, multifamily. For the decade of the 1930's as a whole, the corresponding percentages were 74, 6, and 20, respectively. These percentages represent an important shift in emphasis since the 1920's, when 2-family and multifamily units combined comprised 39 percent of all new units.

TABLE 4.—*Number of New Dwelling Units in Nonfarm Areas, 1939 and 1940, by Geographic Division and Type of Dwelling*

Geographic division	All types		1-family		2-family [1]		Multifamily [2]	
	1940	1939	1940	1939	1940	1939	1940	1939
All divisions	540,000	465,000	425,103	351,641	36,865	27,655	78,032	85,704
Percent of change, 1940 as compared with 1939	+16.1		+20.9		+33.3		−9.0	
New England	25,867	20,110	20,186	13,405	1,695	853	3,986	5,852
Middle Atlantic	82,823	92,908	44,680	44,040	4,121	3,905	34,022	44,963
East North Central	93,474	73,366	82,602	63,577	7,200	3,938	3,672	5,851
West North Central	34,197	30,579	31,627	27,317	1,158	1,191	1,412	2,071
South Atlantic	101,468	77,481	75,739	60,869	7,490	6,089	18,239	10,523
East South Central	28,793	25,923	23,834	20,355	3,716	3,781	1,243	1,787
West South Central	51,190	46,550	41,803	39,342	5,988	3,178	3,399	4,030
Mountain	19,937	16,454	17,913	14,482	706	704	1,318	1,268
Pacific	102,251	81,629	86,719	68,254	4,791	4,016	10,741	9,359

[1] Includes 1- and 2-family dwellings with stores.
[2] Includes multifamily dwellings with stores.

Importance of the various types of units is not uniform in the several geographic divisions. Apartment-type units are of greatest importance in the Middle Atlantic States, where in 1940 they comprised 41 percent of all new units. This type was also important in the South Atlantic, New England, and Pacific States, contributing 18, 15, and 11 percent, respectively, of the new 1940 dwelling facilities. The 2-family type home was of greatest importance in 1940 in the East and West South Central States, comprising more than 11 percent of each total. In contrast are the East and West North Central and East South Central States where apartments were 4 percent of new units. In the West North Central and Mountain States 2-family units were less than 4 percent of each total. Table 4 contains the 1939 and 1940 estimates for each geographic division shown by type of unit.

New Housing, by Source of Funds

In the past 2 years residential developments financed with public funds have been an important part of the new housing supply. Projects of this kind which got under way in 1940 were designed to accommodate 73,533 families, an increase of 30 percent over the 56,542 family capacity of 1939 projects. These totals represent 14 percent of all new units in 1940 and 12 percent in 1939.

Most important in the public housing field has been the role of the United States Housing Authority. The USHA itself builds no homes, but lends money to local housing authorities and aids with subsidies. The primary purpose of the program has been to supply low-rent housing for families previously able to afford only substandard homes. However, as a measure of national defense, Congress late in June 1940 authorized the USHA to use its regular funds for provision of homes in areas where defense needs were urgent.[3] For the duration of the emergency, subsidies and low-income requirements for occupants are suspended on such projects. With a return to normal conditions they will revert to regular USHA status. During 1939 USHA projects for 56,302 low-income families were started in nonfarm areas of the United States. Projects in 1940, including 5,110 dwelling units allocated for defense purposes, had a potential capacity of 51,345 families, a decrease of 9 percent from the 1939 number.

Threats of delay in the national defense program arising from housing shortages in vital areas led Congress in August and October to make further provision for emergency housing.[4] A total of $250,000,000 was made available for defense housing, $100,000,000 to the War and Navy Departments and Maritime Commission, $140,000,000 to the Federal Works Agency, and $10,000,000 to the RFC Mortgage Co. The latter added $40,000,000 of its own funds and formed the subsidiary Defense Homes Corporation.

[3] Public Act No. 671.

[4] Public Acts Nos. 781 and 849, and Public Resolution No. 106.

The Navy Department was the first to use the new funds for construction of defense housing projects. Contracts were awarded by the Navy Department in October to provide for 7,290 families; by the end of 1940 the total increased to 12,165. The War Department and Maritime Commission assigned their funds to the Federal Works Agency which in turn has allotted most of the work to a subordinate unit, the Public Buildings Administration. The PBA, by the end of 1940, had 6,510 dwelling units under construction contract. No projects of the Defense Homes Corporation reached the contract stage during 1940. The total capacity of all projects for defense housing put under contract during 1940 was 23,785 families.

Smaller cities, and also the rural nonfarm area, benefited by greatly increased public funds in 1940. In urban places under 25,000 population projects were started in 1940 for 7,716 families, as compared with only 2,545 in 1939. Defense housing projects situated short distances outside of city limits brought the 1940 total for publicly financed projects in rural nonfarm areas up to 8,583 units, the corresponding total for 1939 being only 1,089.

Despite these trends, publicly financed projects in the large cities still account for a greater proportionate part of the new dwelling-unit total than they do in smaller places. Thus, in cities over 100,000 population, publicly financed projects in 1940 included 23 percent of all new units. For cities smaller than 100,000 population the corresponding proportion was 10 percent; for the rural nonfarm area, 6 percent. During 1939, 24 percent of all new units in cities over 100,000 were publicly financed, 8 percent in urban places of less than 100,000 population, and 1 percent in rural nonfarm areas. The distribution of new dwelling units by source of funds is shown in table 5 for each population group.

TABLE 5.—*Number of New Dwelling Units in Nonfarm Areas, 1939 and 1940, by Source of Funds and Population Group*

Population group	Total		Private funds		Public funds	
	1940	1939	1940	1939	1940	1939
Total nonfarm	540,000	465,000	466,467	408,458	73,533	56,542
Percent of change, 1940 as compared with 1939	+16.1		+14.2		+30.1	
Total urban	385,878	342,107	321,528	286,654	64,350	55,453
500,000 population and over	100,016	104,676	84,476	87,278	15,540	17,398
100,000 to 500,000 population	85,931	72,239	57,875	47,650	28,056	24,589
50,000 to 100,000 population	31,088	28,067	25,390	22,035	5,698	6,032
25,000 to 50,000 population	38,442	31,221	31,102	26,332	7,340	4,889
10,000 to 25,000 population	60,329	48,252	55,136	45,857	5,193	2,395
5,000 to 10,000 population	39,084	32,018	38,042	31,868	1,042	150
2,500 to 5,000 population	30,988	25,634	29,507	25,634	1,481	0
Rural nonfarm	154,122	122,893	144,939	121,804	9,183	1,089

By far the largest concentration of publicly financed projects in 1940 was in the South Atlantic States with 19,233 USHA and defense units. Military and shipbuilding needs caused 4,444 of these units

to be concentrated in the Norfolk-Newport News-Portsmouth district. The East North Central and Middle Atlantic States were next in rank for publicly financed projects, each having approximately 11,000 units. The smallest volumes of publicly financed homes in terms both of number and contribution to total new units in 1939 and 1940 were in the West North Central and Mountain States.

Announcement by the Federal Housing Administration that approximately 31 percent more homes were started under FHA inspection in 1940 than in 1939 reflects the general increases shown in the estimates for privately financed dwelling units. With but one minor exception, all geographic areas showed more privately financed units in both the 1- and 2-family types during 1940 than in the preceding year. In the case of the Middle Atlantic States, a decrease in privately financed apartments caused the total of new units to drop below 1939 levels. Geographic division totals for publicly and privately financed units are shown in table 6.

TABLE 6.—*Number of New Dwelling Units in Nonfarm Areas, 1939 and 1940, by Source of Funds and Geographic Division*

Geographic division	Total		Private funds		Public funds	
	1940	1939	1940	1939	1940	1939
All divisions	540,000	465,000	466,467	408,458	73,533	56,542
Percent of change, 1940 as compared with 1939	+16.1		+14.2		+30.1	
New England	25,867	20,110	19,506	14,620	6,361	5,490
Middle Atlantic	82,823	92,908	71,793	78,684	11,030	14,224
East North Central	93,474	73,366	82,179	66,163	11,295	7,203
West North Central	34,197	30,579	33,800	30,057	397	522
South Atlantic	101,468	77,481	82,235	64,565	19,233	12,916
East South Central	28,793	25,923	22,504	18,115	6,289	7,808
West South Central	51,190	46,550	41,541	41,357	9,649	5,193
Mountain	19,937	16,454	18,558	16,298	1,379	156
Pacific	102,251	81,629	94,351	78,599	7,900	3,030

Estimated Permit Valuations

The permit valuation of the 540,000 new nonfarm dwelling units provided in 1940 is estimated at approximately $1,847,000,000. Of this total $1,622,000,000 was for privately financed units and $225,000,000 for publicly financed. During 1939, the estimated permit valuation corresponding to the 465,000 new units was $1,591,000,000, including $1,406,000,000 private funds and $185,000,000 public.

Although building permits require an estimate of costs of construction to be included, it has been found that permit valuations commonly understate actual costs. Studies of the degree of this understatement are being made at present by the Bureau of Labor Statistics. Incomplete results indicate that construction costs of privately financed 1-family homes are, on the average, 15.5 percent greater than the corresponding permit valuations. In the absence

of a better adjustment factor, permit valuations of privately financed residential construction should be increased by 15.5 percent to yield estimated construction costs. Since construction contract awards for publicly financed projects are reported directly to the Bureau, no adjustment of public totals is necessary. Adjusting total permit valuations as described, the 540,000 new dwelling units provided during 1940 are found to involve total expenditures of approximately $2,100,000,000.

The 1940 totals of estimated permit valuations of new privately financed dwellings and of contract costs for construction of public housing projects are given in table 7.

TABLE 7.—*Permit Valuation of New Dwellings in Nonfarm Areas During 1940, by Source of Funds and Geographic Division*

Geographic division	Estimated permit valuation		
	Total	Private funds	Public funds [1]
All divisions	$1,847,229,000	$1,622,029,000	$225,200,000
New England	106,351,000	84,850,000	21,501,000
Middle Atlantic	331,086,000	297,917,000	33,169,000
East North Central	399,495,000	360,428,000	39,067,000
West North Central	112,900,000	111,583,000	1,317,000
South Atlantic	319,041,000	263,061,000	55,980,000
East South Central	65,587,000	47,943,000	17,644,000
West South Central	136,710,000	108,761,000	27,949,000
Mountain	55,497,000	51,675,000	3,822,000
Pacific	320,562,000	295,811,000	24,751,000

[1] Contract values.

Retail Prices

FOOD PRICES IN FEBRUARY 1941

RETAIL costs of food bought by wage earners and lower-salaried workers advanced 0.1 percent between January 14 and February 18 following previous increases of 1.4 percent in December and 0.5 percent in January. There were sharp advances in pork prices, moderate increases for staples like coffee, sugar, and lard, and somewhat higher prices for some fresh vegetables, particularly green beans and cabbage. These advances were almost wholly offset in the wage earners' budget by the 12.7-percent seasonal reduction in egg prices and by lower prices for beef and fish.

Food costs were 1.3 percent higher on February 18, 1941, than in February 1940, because of about 14 percent higher meat prices and slight advances in prices of dairy products. Costs of other groups of foods were from 1 to 3.5 percent lower than last year, except eggs, which were 13 percent lower. The food-cost index was 97.9 on February 18, 1941, or 2.1 percent below the 1935–39 average.

Details by Commodity Groups

Retail prices of flour declined slightly in February after a steady rise for the previous 4 months and are now 3 percent higher than in September 1940, but 7.4 percent lower than in February a year ago. The average price of white bread remained unchanged for 4 consecutive months, following the 3.5-percent drop between mid-September and mid-October of last year. Bread prices are 3.7 percent below the level of a year ago. Prices of corn flakes, vanilla cookies, and soda crackers rose from 1 to 2 percent in February.

The cost of meats as a whole rose 1.4 percent between mid-January and mid-February as a result of the second successive increase in prices of pork and moderate advances for chickens, veal, and lamb, which were offset to some extent by slightly lower prices for beef and fish. The continued advance in pork prices following smaller marketings of hogs was contrary to the usual seasonal trend for the January–February period. Fresh pork was selling 27 percent higher than during last February, and cured pork 15 percent higher, although pork prices in general were lower both this year and last than in any

February in the previous 6 years. Retail prices of beef were still 13 percent higher than for the same period last year, although they declined slightly between January 14 and February 18. Prices of canned pink salmon advanced for the first time since August 1940, while fresh and frozen fish declined approximately 3 percent.

The cost of dairy products again declined slightly in February as the result of a decrease of 1.6 percent in butter prices and a reduction of 1 cent per quart for milk in Buffalo and Los Angeles. In Minneapolis the average price of milk in 1-quart deliveries advanced 1 cent. Retail prices of butter were about 1 percent lower than a year ago. Cheese prices remained unchanged at a level 2.7 percent higher than in February 1940.

The seasonal drop in egg prices amounted to 12.7 percent between January 14 and February 18. Because of larger supplies this year due to milder weather, prices were 13 percent lower than a year ago and about the same as in February 1938 and 1939.

Costs of fresh vegetables rose more than 4.5 percent in widespread advances between mid-January and mid-February because of unfavorable weather conditions in growing areas. Market prices of cabbage, green beans, and spinach advanced with temporary reductions in supplies resulting from heavy rains which interfered with harvesting and marketing operations in the vegetable-producing areas from Florida to California. Prices of potatoes also advanced seasonally, while carrots and lettuce, on the other hand, declined. There was little change in prices of fresh fruits and of canned and dried fruits and vegetables.

The family budget for fruits and vegetables cost 4 percent less than a year ago, largely because potatoes, green beans, and spinach were selling from 13 to 24 percent lower due to larger supplies. Apple prices continued to be high because of the short crop last fall. Apples were selling 13 percent higher, sweetpotatoes 19 percent, and bananas, oranges, cabbage, carrots, and lettuce 1 to 5 percent higher than in February 1940.

Coffee prices advanced slightly between January 14 and February 18, reflecting the new quota agreement and higher shipping costs, but they were still 5 percent lower than in February of last year. Prices of tea and cocoa remained unchanged for the month at a level 1 percent higher than a year ago.

Retail prices of lard advanced 3 percent in February to a level only 1 percent lower than in February 1940. Prices of other shortenings also advanced for the month but were about 6 percent below last February's prices. Oleomargarine prices moved upward slightly, salad dressing remained unchanged, and peanut butter declined about 1 percent.

The average retail price of sugar rose 0.7 percent during the month but it was still 3 percent lower than in February of last year.

Indexes of retail costs of food for February 1941, January 1941, and February 1940, are shown in table 1. The accompanying chart shows the trend in costs of all foods (1935–39=100) and of each major commodity group for the period January 1929 to February 1941, inclusive.

TABLE 1.—*Indexes of Retail Costs of Food in 51 Large Cities Combined,*[1] *by Commodity Groups, February and January 1941 and February 1940*

[1935–39=100]

Commodity group	1941		1940	Commodity group	1941		1940
	Feb. 18[2]	Jan. 14	Feb. 13		Feb. 18[2]	Jan. 14	Feb. 13
All foods	97.9	97.8	96.6	Fruits and vegetables	95.6	93.3	99.5
				Fresh	96.3	93.4	101.1
Cereals and bakery products	95.0	94.9	97.8	Canned	91.9	91.4	92.7
Meats	102.5	101.1	90.0	Dried	99.6	99.6	101.1
Dairy products	104.4	105.1	103.9	Beverages	91.5	90.9	94.5
Eggs	85.0	97.4	98.0	Fats and oils	81.1	80.3	84.0
				Sugar	96.0	95.3	99.2

[1] Aggregate costs of 54 foods in each city, weighted to represent total purchases of families of wage earners and lower-salaried workers, have been combined with the use of population weights.
[2] Preliminary.

Prices of 23 of 54 foods included in the index were higher in February 1941 than in January, 11 were lower, and for 20 there was no change. Compared with February of last year, 29 foods were quoted at higher prices in February 1941, 22 at lower prices, and for 3 there was no change. Average prices of each of 63 foods for 51 cities combined are shown in table 2 for February and January 1941, and February 1940.

TABLE 2.—*Average Retail Prices of 63 Foods in 51 Large Cities Combined, February and January 1941 and February 1940*

Article		1941		1940
		Feb. 18[1]	Jan. 14	Feb. 13
Cereals and bakery products:				
Cereals:		*Cents*	*Cents*	*Cents*
Flour, wheat	10 pounds	41.3	41.4	44.6
Macaroni	pound	13.8	13.8	14.2
Wheat cereal[2]	28-ounce package	23.5	23.5	23.7
Corn flakes	8-ounce package	7.2	7.1	7.0
Corn meal	pound	4.2	4.2	4.2
Rice[2]	do	8.0	7.9	7.9
Rolled oats[2]	do	7.1	7.1	7.1
Bakery products:				
Bread, white	do	7.8	7.8	8.1
Bread, whole-wheat	do	8.7	8.7	9.0
Bread, rye	do	9.0	9.0	9.5
Vanilla wafers	do	25.6	25.1	25.4
Soda crackers	do	15.1	15.0	15.1
Meats:				
Beef:				
Round steak	do	38.4	38.6	33.8
Rib roast	do	31.3	31.5	28.0
Chuck roast	do	25.1	25.2	22.1

See footnotes at end of table.

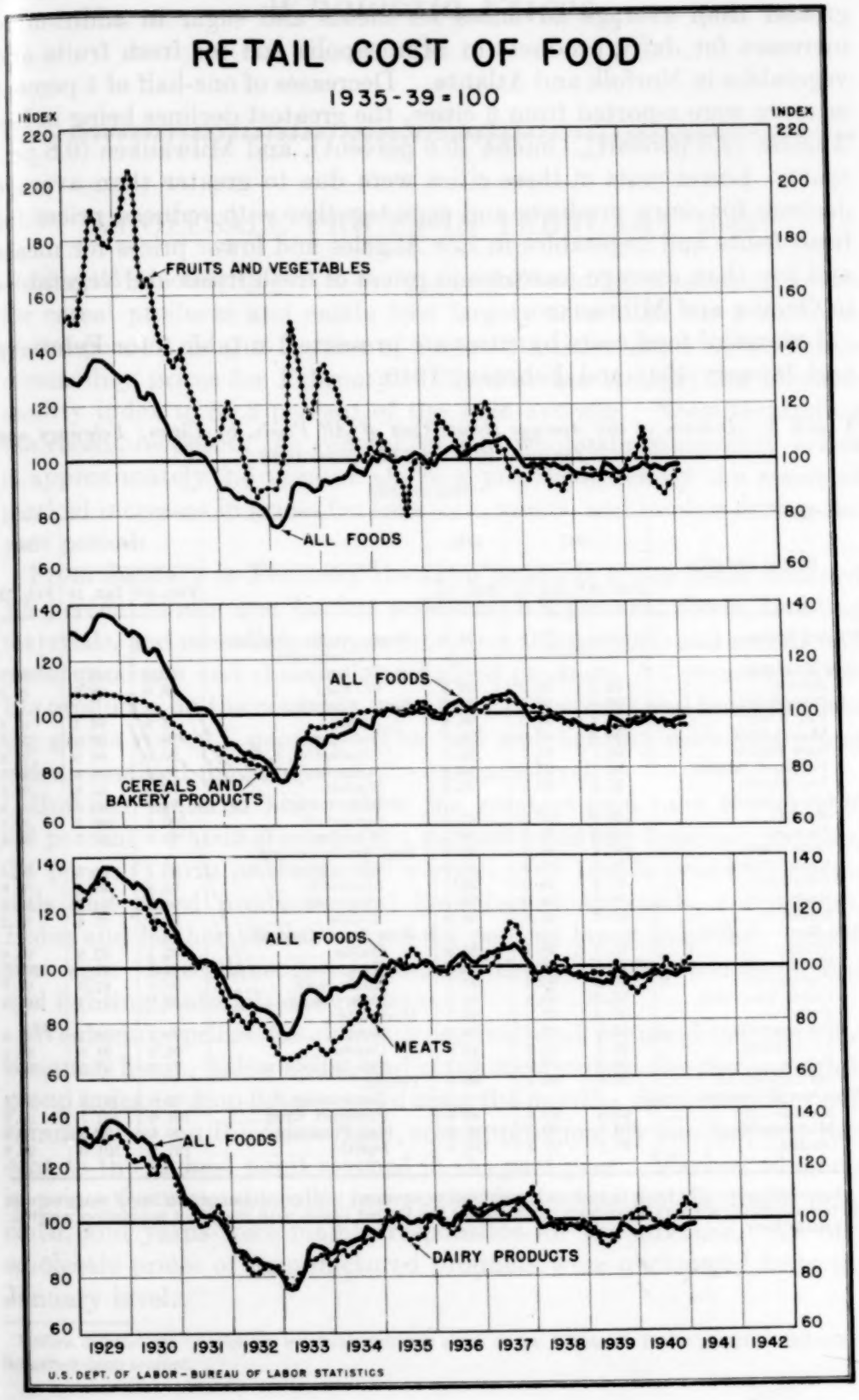
TABLE 2.—*Average Retail Prices of 63 Foods in 51 Large Cities Combined, February and January 1941 and February 1940*—Continued

Article	Unit	1941		1940
		Feb. 18 [1]	Jan. 14	Feb. 13
		Cents	*Cents*	*Cents*
Meats—Continued.				
Veal: Cutlets	pound	46.7	45.2	42.7
Pork:				
Chops	do	29.5	29.1	23.3
Bacon, sliced	do	31.9	30.1	27.6
Ham, sliced [2]	do	46.4	45.1	43.7
Ham, whole	do	27.3	26.2	24.3
Salt pork	do	17.8	16.7	14.3
Lamb:				
Leg	do	27.7	27.8	25.7
Rib chops	do	35.4	35.0	32.3
Poultry: Roasting chickens	do	31.9	31.1	28.0
Fish:				
Fresh, frozen	do	[3]	[3]	[3]
Salmon, pink	16-ounce can	16.0	15.7	15.2
Salmon, red [2]	do	26.7	26.4	25.3
Dairy products:				
Butter	pound	37.4	38.0	37.7
Cheese	do	27.0	27.0	26.3
Milk, fresh (delivered)	quart	13.0	13.0	12.9
Milk, fresh (store)	do	11.9	11.9	11.8
Milk, fresh (delivered and store) [2]	do	12.6	12.7	12.6
Milk, evaporated	14½-ounce can	7.1	7.1	7.0
Eggs	dozen	30.0	34.9	34.5
Fruits and vegetables:				
Fresh:				
Apples	pound	5.2	5.2	4.6
Bananas	do	6.7	6.6	6.4
Oranges	dozen	27.4	27.3	26.8
Beans, green	pound	17.6	14.0	20.2
Cabbage	do	4.5	3.4	4.4
Carrots	bunch	5.4	6.0	5.3
Lettuce	head	8.1	8.4	8.0
Onions	pound	3.6	3.6	3.6
Potatoes	15 pounds	30.0	29.2	39.4
Spinach	pound	7.6	7.3	9.7
Sweetpotatoes	do	5.0	5.0	4.2
Canned:				
Peaches	No. 2½ can	16.5	16.5	17.1
Pineapple	do	21.0	20.9	20.9
Beans, green [2]	No. 2 can	10.1	10.0	10.0
Corn	do	10.7	10.7	10.5
Peas	do	13.2	13.2	13.7
Tomatoes	do	8.4	8.4	8.5
Dried:				
Prunes	pound	9.6	9.6	9.5
Navy beans	do	6.5	6.5	6.6
Beverages:				
Coffee	do	20.8	20.7	21.9
Tea	¼ pound	17.6	17.6	17.4
Cocoa [2]	8-ounce can	9.1	9.1	9.0
Fats and oils:				
Lard	pound	9.6	9.3	9.7
Shortening, other than lard:				
In cartons	do	11.4	11.3	12.1
In other containers	do	18.3	18.3	19.6
Salad dressing	pint	20.1	20.1	21.0
Oleomargarine	pound	15.7	15.6	16.2
Peanut butter	do	17.7	17.9	17.9
Sugar and sweets:				
Sugar	10 pounds	51.6	51.2	53.4
Corn sirup [2]	24-ounce can	13.6	13.6	13.5
Molasses [2]	18-ounce can	13.4	13.4	13.5

[1] Preliminary.
[2] Not included in index.
[3] Composite prices not computed.

Details by Regions and Cities

Retail costs of food advanced in 27 cities, declined in 18, and for 6 there was no change between January 14 and February 18, 1941. Increases of 1 percent or more were reported from 10 cities, the largest advances being in Norfolk (3.9 percent), Atlanta (1.6 percent), and


RETAIL COST OF FOOD
1935-39=100
INDEX
220
200
180
160
140
120
100
80
60
FRUITS AND VEGETABLES
ALL FOODS
ALL FOODS
CEREALS AND BAKERY PRODUCTS
ALL FOODS
MEATS
ALL FOODS
DAIRY PRODUCTS
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942
U.S. DEPT. OF LABOR - BUREAU OF LABOR STATISTICS

Minneapolis (1.5 percent). Higher costs in these cities were due to greater than average advances for meats and sugar in addition to increases for dairy products in Minneapolis and for fresh fruits and vegetables in Norfolk and Atlanta. Decreases of one-half of 1 percent or more were reported from 6 cities, the greatest declines being in Los Angeles (2.8 percent), Omaha (0.6 percent), and Milwaukee (0.6 percent). Lower costs in these cities were due to greater than average declines for dairy products and eggs together with reduced prices for fresh fruits and vegetables in Los Angeles and lower prices for meats and less than average increases in prices of fresh fruits and vegetables in Omaha and Milwaukee.

Indexes of food costs by cities are presented in table 3 for February and January 1941 and February 1940.

TABLE 3.—*Indexes of the Average Retail Cost of All Foods, by Cities,*[1] *February and January 1941 and February 1940*

[1935-39=100]

Region and city	1941		1940	Region and city	1941		1940
	Feb. 18[2]	Jan. 14	Feb. 13		Feb. 18[2]	Jan. 14	Feb. 13
United States	97.9	97.8	96.6	West North Central—Continued.			
New England:				St. Louis	99.3	99.2	98.1
Boston	96.2	95.2	96.9	St. Paul	98.6	98.6	97.3
Bridgeport	96.4	96.5	96.7	South Atlantic:			
Fall River	98.4	97.5	96.9	Atlanta	95.8	94.3	97.7
Manchester	96.8	96.6	98.6	Baltimore	98.3	97.9	97.0
New Haven	96.1	95.7	96.1	Charleston, S. C	95.9	95.9	97.5
Portland, Maine	94.7	93.8	93.9	Jacksonville	99.2	98.8	97.9
Providence	97.3	96.3	96.3	Norfolk	99.5	95.8	95.4
Middle Atlantic:				Richmond	94.7	93.7	94.4
Buffalo	100.2	100.2	97.9	Savannah	100.1	100.5	99.1
Newark	100.2	98.8	98.2	Washington, D. C	98.8	97.7	96.4
New York	100.4	99.5	99.2	East South Central:			
Philadelphia	94.9	95.0	93.8	Birmingham	95.1	95.5	95.1
Pittsburgh	97.5	98.0	96.3	Louisville	95.8	95.5	93.6
Rochester	99.8	99.9	98.0	Memphis	94.8	94.2	95.0
Scranton	97.7	97.5	96.9	Mobile	97.7	97.4	95.2
East North Central:				West South Central:			
Chicago	97.9	98.2	95.9	Dallas	92.1	92.6	93.4
Cincinnati	96.5	96.5	94.0	Houston	102.1	102.6	100.1
Cleveland	99.2	99.2	97.1	Little Rock	95.6	95.6	97.9
Columbus, Ohio	93.2	93.4	94.9	New Orleans	102.0	101.9	101.3
Detroit	97.2	97.0	95.1	Mountain:			
Indianapolis	97.9	98.2	95.9	Butte	98.4	98.7	97.0
Milwaukee	95.3	95.9	94.6	Denver	94.4	94.8	95.5
Peoria	99.3	99.0	97.1	Salt Lake City	97.8	97.5	95.7
Springfield, Ill	96.6	96.2	96.6	Pacific:			
West North Central:				Los Angeles	99.0	101.8	96.4
Kansas City	93.6	92.4	93.9	Portland, Oreg	101.6	101.7	98.6
Minneapolis	100.5	99.0	98.8	San Francisco	99.6	99.6	95.6
Omaha	97.3	97.9	96.5	Seattle	101.1	101.0	99.9

[1] Aggregate costs of 54 foods in each city, weighted to represent total purchases of families of wage earners and lower-salaried workers, have been combined for the United States with the use of population weights.
[2] Preliminary.

Wholesale Prices

WHOLESALE PRICES IN FEBRUARY 1941 [1]

A SHARP decline in prices for grains followed by weakening prices for cereal products and cattle feed largely accounted for a decrease of 0.2 percent in the Bureau of Labor Statistics index of wholesale commodity prices for February. The decrease brought the all-commodity index to 80.6 percent of the 1926 average. Notwithstanding the recent recession, the general level of wholesale commodity prices is approximately 2.5 percent above a year ago, mainly the result of marked increases in prices for livestock, meats, and lumber during the year period.

From January to February the farm products group index declined 1.8 percent; hides and leather products, 0.8 percent; foods, building materials, and miscellaneous commodities, 0.3 percent; and metals and metal products and chemicals and allied products, 0.1 percent. Textile products, on the contrary, advanced 1.6 percent and housefurnishing goods rose 0.1 percent. The fuel and lighting materials group index remained unchanged at the January level.

Building material prices show the greatest gain over a year ago, 6.5 percent. Foods increased 3.4 percent from last February; metals, 2.4 percent; farm products, 2.3 percent; and textile products, chemicals and allied products, and housefurnishing goods, 1.3 percent. Hides and leather products were 0.8 percent lower than they were a year ago. Miscellaneous commodities dropped 0.5 percent and fuel and lighting materials, 0.4 percent.

Weakening prices for domestic agricultural commodities, and for bananas, hemp, hides, skins, and scrap steel caused the raw materials group index to drop 0.8 percent during the month. Semimanufactured commodities, on the other hand, rose approximately one-half of 1 percent to the highest point reached in the past year. Marked advances in prices for vegetable oils, raw sugar, nonferrous metals, rosin, print cloth, and yarns were mainly responsible for the advance. Average wholesale prices of manufactured products were unchanged from the January level.

[1] More detailed information on wholesale prices is given in the Wholesale Prices pamphlet and will be furnished upon request.

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The decline of 1.8 percent in the farm products group index during February was largely the result of a decrease of 4.6 percent for grains. Rye dropped over 9 percent; wheat and barley, more than 5.5 percent; oats, approximately 3.5 percent; and corn, nearly 3 percent. Livestock prices decreased 0.7 percent. Quotations were lower for cows, steers, and hogs. Calves, sheep, and live poultry, on the other hand, advanced. Seasonal decreases occurred in prices for eggs and citrus fruits. Prices were also lower for fresh milk, seeds, dried beans, tobacco, and domestic wool. Higher prices were reported for cotton, foreign wool, apples, onions, potatoes, and hops. The February farm products group index, 70.3, was 2.3 percent above a year ago, primarily due to an increase of over 25.5 percent in prices for livestock and poultry. Grains were nearly 11.5 percent lower than they were a year ago.

The slight decline in the foods group index reflected a sharp drop in prices for cereal products including flour, oatmeal, and corn meal. In addition, prices were lower for butter, cheese, cured and fresh beef, and lamb. Certain canned and dried fruits were below the January level and glucose, edible tallow, and certain vegetable oils also declined. Important advances in food prices were nearly 9 percent for lard, about 6 percent for coffee, 5 percent for rice, and higher prices for canned apples, peaches, corn, and string beans, and for fresh pork, veal, dressed poultry, mutton, bacon, ham, cocoa beans, canned salmon, oleomargarine, sugar, tea, and coconut, corn, and peanut oils. Average wholesale prices of foods were 3.4 percent higher than a year ago largely because of an advance of over 22 percent in meats. Cereal products, on the contrary, were nearly 10.5 percent lower than for February a year ago.

Weakening prices for hides and skins caused the hides and leather products group index to drop 0.8 percent. Average wholesale prices for shoes and other leather manufactures were firm.

Heavy buying by the trade forced prices for cotton goods up 2.2 percent in February bringing the textile products group index to the highest level since January 1940. Practically all types of materials shared in the advance, the most important of which were broadcloth, denim, drills, duck, osnaburg, print cloth, sheeting, toweling, and tire fabrics. Woolen and worsted goods also advanced 2.2 percent and prices were higher for men's and boys' dress and work clothing. Raw silk, burlap, jute, and sisal continued to advance because of shipping difficulties and higher ocean freight rates.

A slight decline in prices for bituminous coal and lower prices for fuel oil, kerosene, and gasoline was offset by higher prices for Pennsylvania crude petroleum, and the index for the fuel and lighting materials group remained unchanged at 72.1 percent of the 1926 level. Average prices for anthracite and coke were steady.

The nonferrous metal market continued to be active, particularly for scrap materials. In addition prices were higher for pig tin, pig lead, quicksilver, babbitt metal, solder, and for certain farm machinery items and heating equipment. Scrap steel in the Chicago market declined nearly 4 percent in February.

Following the pronounced rise in lumber late in 1940 and early in 1941, prices weakened in February and declined 1 percent. Quotations were lower for Douglas fir, most types of pine, red oak and maple flooring. Higher prices were quoted for gum and poplar and for millwork. Shellac, rosin, and tung oil rose sharply while linseed oil and turpentine declined.

Industrial fats and oils advanced 1.3 percent and prices were also higher for fatty acids, menthol, cream of tartar, tartaric acid, and tin tetrachloride. Fertilizer materials, except ground bones, declined. Lower prices were reported for lead arsenate and ergot.

Prices for housefurnishings such as carpets, rugs, pillow cases, and sheets averaged higher.

Crude rubber advanced 2.9 percent during February. Paper and pulp rose 0.2 percent as a result of higher prices for boxboard. Ground wood declined 5¾ percent. Prices for soap and soap products were higher probably because of the marked advance in prices for fats and oils.

Index numbers for the groups and subgroups of commodities for January and February 1941 and February 1940 and the percentage changes from a month ago and a year ago are shown in table 1.

TABLE 1.—*Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities, February 1941, With Comparisons for January 1941 and February 1940*

[1926=100]

Group and subgroup	February 1941	January 1941	Change from a month ago	February 1940	Change from a year ago
			Percent		*Percent*
All commodities	**80.6**	**80.8**	**−0.2**	**78.7**	**+2.4**
Farm products	**70.3**	**71.6**	**−1.8**	**68.7**	**+2.3**
Grains	64.5	67.6	−4.6	72.8	−11.4
Livestock and poultry	82.4	83.0	−.7	65.6	+25.6
Other farm products	64.2	65.3	−1.7	68.9	−6.8
Foods	**73.5**	**73.7**	**−.3**	**71.1**	**+3.4**
Dairy products	79.7	80.2	−.6	80.0	−.4
Cereal products	73.8	74.8	−1.3	82.4	−10.4
Fruits and vegetables	59.4	59.6	−.3	58.7	+1.2
Meats	83.6	83.2	+.5	68.4	+22.2
Other foods	64.2	64.5	−.5	66.3	−3.2
Hides and leather products	**101.6**	**102.4**	**−.8**	**102.4**	**−.8**
Shoes	107.4	107.4	0	108.2	−.7
Hides and skins	94.8	99.1	−4.3	97.0	−2.3
Leather	94.5	94.4	+.1	94.2	+.3
Other leather products	99.7	99.7	0	100.0	−.3

TABLE 1.—*Index Numbers of Wholesale Prices by Groups and Subgroups of Commodities, February 1941, With Comparisons for January 1941 and February 1940*—Con.

Group and subgroup	February 1941	January 1941	Change from a month ago	February 1940	Change from a year ago
			Percent		*Percent*
Textile products	**76.4**	**75.2**	**+1.6**	**75.4**	**+1.3**
Clothing	87.2	86.6	+.7	84.9	+2.7
Cotton goods	77.5	75.8	+2.2	73.6	+5.3
Hosiery and underwear	60.3	59.9	+.7	64.5	−6.5
Rayon	29.5	29.5	0	29.5	0
Silk	43.3	42.5	+1.9	51.6	−16.1
Woolen and worsted goods	91.2	89.2	+2.2	87.2	+4.6
Other textile products	76.8	74.8	+2.7	76.8	0
Fuel and lighting materials	**72.1**	**72.1**	**0**	**72.4**	**−.4**
Anthracite	81.1	81.1	0	79.2	+2.4
Bituminous coal	100.3	100.4	−.1	98.2	+2.1
Coke	113.8	113.8	0	109.7	+3.7
Electricity	(1)	(1)		78.2	
Gas	(1)	77.5		81.6	
Petroleum and products	50.0	50.0	0	50.9	−1.8
Metals and metal products	**97.6**	**97.7**	**−.1**	**95.3**	**+2.4**
Agricultural implements	92.8	92.7	+.1	93.4	−.6
Farm machinery	94.0	94.0	0	94.6	−.6
Iron and steel	95.5	95.7	−.2	96.3	−.8
Motor vehicles	99.8	100.3	−.5	94.7	+5.4
Nonferrous metals	84.0	83.6	+.5	79.2	+6.1
Plumbing and heating	82.2	80.5	+2.1	79.1	+3.9
Building materials	**99.3**	**99.6**	**−.3**	**93.2**	**+6.5**
Brick and tile	91.4	91.3	+.1	91.2	+.2
Cement	90.8	90.8	0	91.4	−.7
Lumber	117.2	118.4	−1.0	97.7	+20.0
Paint and paint materials	86.6	86.7	−.1	86.8	−.2
Plumbing and heating	82.2	80.5	+2.1	79.1	+3.9
Structural steel	107.3	107.3	0	107.3	0
Other building materials	94.9	94.9	0	92.9	+2.2
Chemicals and allied products	**78.5**	**78.6**	**−.1**	**77.5**	**+1.3**
Chemicals	85.7	85.6	+.1	85.3	+.5
Drugs and pharmaceuticals	96.9	96.5	+.4	81.3	+19.2
Fertilizer materials	70.4	70.7	−.4	71.0	−.8
Mixed fertilizers	73.8	75.2	−1.9	74.2	−.5
Oils and fats	46.8	46.2	+1.3	51.0	−8.2
Housefurnishing goods	**89.1**	**89.0**	**+.1**	**88.0**	**+1.3**
Furnishings	95.3	95.2	+.1	94.2	+1.2
Furniture	82.6	82.6	0	81.5	+1.3
Miscellaneous	**76.9**	**77.1**	**−.3**	**77.3**	**−.5**
Automobile tires and tubes	58.2	58.2	0	55.6	+4.7
Cattle feed	81.2	89.1	−8.9	93.7	−13.3
Paper and pulp	93.3	93.1	+.2	89.5	+4.2
Rubber, crude	42.2	41.0	+2.9	38.7	+9.0
Other miscellaneous	82.9	82.8	+.1	86.6	−4.3
Raw materials	**74.0**	**74.6**	**−.8**	**72.7**	**+1.8**
Semimanufactured articles	**81.6**	**81.3**	**+.4**	**79.9**	**+2.1**
Manufactured products	**83.5**	**83.5**	**0**	**81.4**	**+2.6**
All commodities other than farm products	**82.7**	**82.7**	**0**	**80.8**	**+2.4**
All commodities other than farm products and foods	**84.4**	**84.3**	**+.1**	**83.2**	**+1.4**

[1] Data not yet available.

Index Numbers by Commodity Groups, 1926 to February 1941

Index numbers of wholesale prices by commodity groups for selected years from 1926 to 1940, inclusive, and by months from February 1940 to February 1941, inclusive, are shown in table 2.

TABLE 2.—*Index Numbers of Wholesale Prices by Groups of Commodities*

[1926=100]

Year and month	Farm products	Foods	Hides and leather products	Textile products	Fuel and lighting	Metals and metal products	Building materials	Chemicals and allied products	House-furnishing goods	Miscellaneous	All commodities
By years:											
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1929	104.9	99.9	109.1	90.4	83.0	100.5	95.4	94.0	94.3	82.6	95.3
1932	48.2	61.0	72.9	54.9	70.3	80.2	71.4	73.9	75.1	64.4	64.8
1933	51.4	60.5	80.9	64.8	66.3	79.8	77.0	72.1	75.8	62.5	65.9
1936	80.9	82.1	95.4	71.5	76.2	87.0	86.7	78.7	81.7	70.5	80.8
1937	86.4	85.5	104.6	76.3	77.6	95.7	95.2	82.6	89.7	77.8	86.3
1938	68.5	73.6	92.8	66.7	76.5	95.7	90.3	77.0	86.8	73.3	78.6
1939	65.3	70.4	95.6	69.7	73.1	94.4	90.5	76.0	86.3	74.8	77.1
1940	67.7	71.3	100.8	73.8	71.7	95.8	94.8	77.0	88.5	77.3	78.6
By months:											
1940:											
February	68.7	71.1	102.4	75.4	72.4	95.3	93.2	77.5	88.0	77.3	78.7
March	67.9	70.2	101.8	74.0	72.2	95.5	93.3	77.0	88.0	76.9	78.4
April	69.4	71.6	101.8	72.9	71.8	94.5	92.5	76.8	88.4	77.7	78.6
May	67.9	71.4	101.3	72.9	71.7	94.5	92.5	76.7	88.5	77.7	78.4
June	66.2	70.3	99.2	72.6	71.4	94.7	92.4	76.1	88.5	77.3	77.5
July	66.5	70.3	99.0	72.4	71.1	95.1	[1] 92.5	77.0	88.5	77.7	77.7
August	65.6	70.1	96.9	72.3	71.1	94.9	[1] 93.3	76.7	88.5	76.7	77.4
September	66.2	71.5	98.3	72.5	71.0	95.4	[1] 95.6	76.8	88.5	76.5	78.0
October	66.4	71.1	100.4	73.6	71.6	97.3	97.8	76.9	88.6	76.9	78.7
November	68.2	72.5	102.3	74.5	71.9	97.6	98.9	77.5	88.6	77.5	79.6
December	69.7	73.5	102.3	74.8	71.7	97.6	99.3	77.7	88.9	77.3	80.0
1941:											
January	71.6	73.7	102.4	75.2	72.1	97.7	99.6	78.6	89.0	77.1	80.8
February	70.3	73.5	101.6	76.4	72.1	97.6	99.3	78.5	89.1	76.9	80.6

[1] Revised.

The price trend for specified years and months since 1926 is shown in table 3 for the following groups of commodities: Raw materials, semimanufactured articles, manufactured products, commodities other than farm products, and commodities other than farm products and foods. The list of commodities included under the classifications "Raw materials," "Semimanufactured articles," and "Manufactured products" was given in Serial No. R 1251—Wholesale Prices, December and Year 1940.

TABLE 3.—*Index Numbers of Wholesale Prices by Special Groups of Commodities*

[1926=100]

Year and month	Raw materials	Semimanufactured articles	Manufactured products	All commodities other than farm products	All commodities other than farm products and foods
By years:					
1926	100.0	100.0	100.0	100.0	100.0
1929	97.5	93.9	94.5	93.3	91.6
1932	55.1	59.3	70.3	68.3	70.2
1933	56.5	65.4	70.5	69.0	71.2
1936	79.9	75.9	82.0	80.7	79.6
1937	84.8	85.3	87.2	86.2	85.3
1938	72.0	75.4	82.2	80.6	81.7
1939	70.2	77.0	80.4	79.5	81.3
1940	71.9	79.1	81.6	80.8	83.0
By months:					
1940:					
February	72.7	79.9	81.4	80.8	83.2
March	72.0	79.7	81.1	80.5	82.9
By months—Con.					
1940—Con.					
April	73.0	78.2	81.2	80.5	82.5
May	72.0	78.3	81.3	80.5	82.5
June	70.7	77.9	80.5	79.8	82.2
July	70.7	77.8	80.9	80.0	82.3
August	69.8	77.0	81.0	79.9	82.0
September	70.5	77.6	81.5	80.4	82.3
October	71.4	79.4	82.1	81.3	83.5
November	72.6	80.7	82.6	81.9	84.1
December	73.6	80.7	82.8	82.1	84.1
1941:					
January	74.6	81.3	83.5	82.7	84.3
February	74.0	81.6	83.5	82.7	84.4

Weekly Fluctuations

Weekly fluctuations in the major commodity group classifications during January and February are shown by the index numbers in table 4.

TABLE 4.—*Weekly Index Numbers of Wholesale Prices by Commodity Groups, January and February 1941*

[1926=100]

Commodity group	Feb. 22	Feb. 15	Feb. 8	Feb. 1	Jan. 25	Jan. 18	Jan. 11	Jan. 4
All commodities	80.4	80.5	80.5	80.6	80.8	80.6	80.2	80.2
Farm products	70.2	70.5	70.7	71.7	72.6	71.4	71.0	71.2
Foods	73.2	73.3	73.2	73.7	74.1	73.7	73.0	73.2
Hides and leather products	101.9	101.9	102.2	102.6	102.6	102.9	102.8	102.5
Textile products	75.6	75.6	75.4	75.2	74.6	74.6	74.2	74.3
Fuel and lighting materials	72.7	72.7	72.9	72.6	72.6	72.6	72.6	72.6
Metals and metal products	97.9	97.9	97.8	97.8	97.8	97.8	97.8	97.8
Building materials	99.3	99.4	99.4	99.5	99.5	99.7	99.6	99.4
Chemicals and allied products	78.5	78.7	78.6	78.8	78.8	78.6	78.2	78.0
Housefurnishing goods	90.2	90.2	90.5	90.4	90.5	90.4	90.4	90.2
Miscellaneous	76.7	76.7	76.8	76.8	76.8	76.9	77.1	77.1
Raw materials	73.7	73.8	73.8	74.4	74.9	74.3	74.1	74.2
Semimanufactured articles	81.4	81.2	81.2	81.3	81.1	81.1	80.8	80.7
Manufactured products	83.7	83.8	83.8	83.8	83.9	83.8	83.4	83.2
All commodities other than farm products	82.6	82.7	82.6	82.6	82.7	82.6	82.3	82.1
All commodities other than farm products and foods	84.5	84.6	84.6	84.5	84.4	84.5	84.4	84.4

WHOLESALE PRICE TRENDS OF CARPETS AND RUGS

THE results of a survey covering wholesale price trends of Axminster, plain velvet, and Wilton types of carpets and rugs were incorporated in the Bureau's indexes of wholesale prices beginning with January 1941. Composite average prices and index numbers for each of the types of carpets and rugs for all periods for which sufficient information is available from January 1933 to date are given in the February 1941 issue of the pamphlet, "Wholesale Prices." Copies of this pamphlet may be obtained upon request.

Trend of Employment and Pay Rolls

SUMMARY OF REPORTS FOR FEBRUARY 1941

Total Nonagricultural Employment

EMPLOYMENT in nonagricultural industries increased by approximately 273,000 workers from January to February, raising the estimated total to 36,592,000. This figure does not include CCC enrollees, workers on WPA or NYA projects, nor the armed forces. The February total was above all preceding February levels and was 2,226,000 greater than a year ago. Each of the major groups reported employment gains over the month, the largest being in manufacturing which showed a slightly greater-than-seasonal gain of 184,000 wage earners, due primarily to steadily expanding employment in defense industries. Increased activity in Federal construction accounted for a contraseasonal employment gain of 34,000 on construction projects, and wholesale and retail trade establishments reported a contraseasonal rise of 5,000 workers. All groups showed increased employment over February 1940, the largest gains being in manufacturing (980,000) and in construction (718,000).

Emergency employment showed an increase of 261,000 as a result of the following changes: A decrease of 4,000 on projects operated by the Works Projects Administration and increases of 64,000 on the out-of-school work program of the National Youth Administration, 187,000 in the military service, and 14,000 in the Civilian Conservation Corps.

Industrial and Business Employment

Of the 157 manufacturing industries surveyed, 128 reported more workers in February than in January and 137 reported larger pay rolls, most of the gains being either larger than seasonal or contraseasonal. Of the 16 nonmanufacturing industries regularly covered, 10 reported employment increases and a like number reported payroll gains.

The increase of 2.1 percent or 184,000 in the number of factory wage earners was somewhat larger than seasonal (1.6 percent), while the gain of 5.1 percent or $11,763,000 in weekly wages was about equal to the expected seasonal rise of 4.8 percent. These gains brought the

levels of factory employment and pay rolls to the highest points on record. The expansion in employment and pay rolls was much more pronounced in the durable-goods group than in the nondurable-goods group of manufacturing industries.

Key defense industries showing substantial employment gains from January to February were aircraft, shipbuilding, machine tools, engines, machine-tool accessories, screw-machine products, firearms, ammunition, abrasives, and explosives. Other manufacturing industries affected by war-material orders and showing large employment gains were automobiles, electrical machinery, steel, foundries and machine shops, brass, bronze, and copper products, and chemicals. Among the few industries showing reductions in employment were meat packing, canning and preserving, beet sugar, typewriters, and agricultural implements.

Retail trade employment showed a slight contraseasonal increase in contrast to an average February decrease of 1.3 percent shown for the past 12 years. The largest gains were reported by variety stores, farmers' supply stores, groceries, automobile dealers, and shoe stores. Wholesale trade firms also reported a slight contraseasonal employment gain, primarily because of expansion by assemblers and country buyers and increases in stores selling dry goods and apparel, machinery equipment and supplies, lumber and building materials, hardware, furniture and housefurnishings, iron and steel scrap, and farm supplies.

General building contractors engaged in private construction reported an employment decrease of 3.0 percent, while special-trades contractors reduced employment only 0.7 percent. Five of the 15 special building trades surveyed reported increased employment, namely, excavating, painting and decorating, structural and steel erection, carpentering, and tile and terrazzo contracting. The reports on which these building construction figures are based do not cover construction projects financed by the Work Projects Administration, the Public Works Administration, and the Reconstruction Finance Corporation, or by regular appropriations of the Federal, State, or local governments.

A preliminary report of the Interstate Commerce Commission for class I steam railroads showed an employment gain of 1.1 percent between January and February, the total number employed in February being 1,029,710. Corresponding pay-roll figures for February were not available when this report was prepared. For January they were $169,732,636, an increase of $2,444,471 since December.

Hours and earnings.—The average hours worked per week by manufacturing wage earners were 40.0 in February, an increase of 2.6 percent from January. The corresponding average hourly earnings were 69.2 cents, a gain of 0.4 percent from the preceding month. The average weekly earnings of factory workers (both full- and part-time

combined) were $28.56 an increase of 3.0 percent since January. Of the 16 nonmanufacturing industries regularly surveyed, 14 reported increases in average weekly earnings. Of the 14 nonmanufacturing industries for which man-hours are available, 9 showed gains in average hours worked per week and 13 reported increases in average hourly earnings.

TABLE 1.—*Employment, Pay Rolls, and Earnings in All Manufacturing Industries Combined and in Nonmanufacturing Industries, February 1941 (Preliminary Figures)*

Industry	Employment			Pay rolls			Average weekly earnings		
	Index, February 1941	Percentage change from—		Index, February 1941	Percentage change from—		Average in February 1941	Percentage change from—	
		January 1941	February 1940		January 1941	February 1940		January 1941	February 1940
	(*1923–25 = 100*)			(*1923–25 = 100*)					
All manufacturing industries combined [1]	117.8	+2.1	+12.2	126.9	+5.1	+27.8	$28.56	+3.0	+13.8
Class I steam railroads [2]	100.9	+1.1	+3.5	[3]	[3]	[3]	[3]	[3]	[3]
	(*1929 = 100*)			(*1929 = 100*)					
Coal mining:									
Anthracite [4]	50.6	+.5	−2.0	45.2	+17.4	+37.3	29.35	+16.8	+40.2
Bituminous [4]	90.8	+.7	−.9	91.0	+3.7	+4.6	26.77	+3.0	+5.5
Metalliferous mining	73.0	+.7	+10.1	72.7	+3.1	+13.2	31.29	+2.4	+2.8
Quarrying and nonmetallic mining	42.3	+1.4	+10.6	37.9	+2.9	+23.1	22.38	+1.5	+11.3
Crude-petroleum production	60.0	−.8	−4.8	56.3	+.1	−4.7	33.56	+.9	+.1
Public utilities:									
Telephone and telegraph [5]	80.5	+.2	+6.1	102.9	−1.0	+6.2	[6] 31.30	−1.2	+.1
Electric light and power [5]	89.6	−.9	+.5	104.9	−.2	+2.7	[6] 35.72	+.7	+2.1
Street railways and busses [5 7]	68.0	−.4	−1.0	70.6	−[8]	−1.3	[6] 33.77	+.4	−.2
Trade:									
Wholesale [9]	91.3	+.1	+1.2	80.8	+.4	+4.8	[6] 30.69	+.3	+3.5
Retail [5]	90.6	+.1	+4.1	84.0	+.4	+6.2	[6] 21.59	+.2	+2.0
Hotels (year-round) [4 10]	93.7	+.8	+1.8	86.0	+2.2	+3.9	[6] 15.87	+1.4	+2.1
Laundries [4]	101.0	−.4	+5.4	89.6	−.2	+7.8	18.41	+.2	+2.3
Dyeing and cleaning [4]	101.2	+.2	+8.0	74.3	+1.4	+15.4	20.16	+1.2	+6.8
Brokerage	[3]	−2.1	−12.9	[3]	−2.6	−12.7	[6] 37.71	−.6	+.2
Insurance	[3]	+.7	+2.0	[3]	+1.3	+5.2	[6] 37.76	+.6	+3.1
Building construction	[3]	−2.0	+37.5	[3]	−.4	+52.6	32.67	+1.6	+11.0
Water transportation [11]	77.4	+.7	[3]	[3]	[3]	[3]	[3]	[3]	[3]

[1] Revised indexes. Adjusted to preliminary 1939 Census of Manufactures. See table 9 in December 1940 "Employment and Pay Rolls" for comparable series back to January 1919.
[2] Preliminary. Source—Interstate Commerce Commission.
[3] Not available.
[4] Indexes adjusted to 1935 Census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet, "Employment and Pay Rolls."
[5] Retail-trade indexes adjusted to 1935 Census and public-utility indexes to 1937 Census. Not comparable with indexes published in pamphlets prior to January 1940 or in the Monthly Labor Review prior to April 1940. Revised series available upon request.
[6] Average weekly earnings not strictly comparable with figures published in issues of the pamphlet dated earlier than January 1938, or in the Monthly Labor Review dated earlier than April 1938 (except for the January figures appearing in the March issue), as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.
[7] Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.
[8] Less than a tenth of 1 percent.
[9] Indexes adjusted to 1933 Census. Comparable series in November 1934 and subsequent issues of pamphlet or February 1935 and subsequent issues of Monthly Labor Review.
[10] Cash payments only; the additional value of board, room, and tips cannot be computed.
[11] Based on estimates prepared by the United States Maritime Commission.

General wage-rate increases between January 16 and February 15 were reported by 304 of the 33,721 manufacturing establishments which supplied employment information in February. These increases averaged 6.1 percent and affected 74,598 of the 6,633,704 wage earners covered. Among the industries in which the largest

numbers of workers received pay raises were automobiles (10,067), glass (7,279), foundries (2,775), shipbuilding (4,034), steel (2,673), electrical machinery (2,737), sawmills (1,956), and dyeing and finishing textiles (1,668). The wage-rate changes reported for nonmanufacturing industries were negligible. As the Bureau's survey does not cover all manufacturing establishments in an industry, and furthermore, as some firms may have failed to report wage changes, these figures should not be construed as representing the total number of wage changes occurring in manufacturing and nonmanufacturing industries.

Employment and pay-roll indexes and average weekly earnings for February 1941 are given in table 1 for all manufacturing industries combined, for selected nonmanufacturing industries, for water transportation, and for class I railroads. Percentage changes over the month and year intervals are also given.

Public Employment

The extent to which defense activities are being given precedence over non-defense activities is shown by February employment figures on construction projects financed from appropriations to regular Federal agencies. Employment on defense projects increased by 99,000 to 730,000, while the number of men at work on non-defense construction fell to 141,000, a loss of 14,000 from the preceding month. Sizable gains were reported on defense building, naval vessel, and airport construction projects. The number of men at work on all types of projects, both defense and non-defense, rose to 871,000 in the month ending February 15, a gain of 85,000 over January. Pay-roll disbursements of $111,933,000 on all types of projects were $10,969,000 greater than in January.

Employment on low-rent projects of the United States Housing Authority fell off slightly from January. Approximately 41,000 men were working on housing projects during the month ending February 15. Of these, 6,000 were employed on defense housing projects. Pay-roll disbursements amounted to $4,000,000, a decrease of $99,000 from January.

Construction projects financed by the Public Works Administration gave employment to 15,000 men in the month ending February 15. This was 2,000 less than the number employed in the preceding month and a decline of 94,000 from February 1940. Pay rolls were $1,756,000, $128,000 lower than January payments.

Employment on construction projects financed by the Reconstruction Finance Corporation rose from 3,000 to approximately 3,600 in the month ending February 15. The number of men at work on defense projects showed a 50 percent gain from January to February, while the number on non-defense work decreased slightly. Pay-roll disbursements of $413,000 were $118,000 more than January payments.

Reaching a winter peak in January, the relief load lightened slightly in February with a decrease of 4,000 in the number of persons employed on work-relief projects of the Work Projects Administration. Of the 1,837,000 persons employed on work relief, 463,000 were working on defense projects and 1,374,000 were engaged in non-defense activities. Wage payments of $92,445,000 were $9,197,000 less than in January. Employment on Federal Agency projects financed by the Work Projects Administration showed little change from January to February, but there was a shift of approximately 1,500 workers from non-defense activities to defense work. Wage payments to the 65,000 persons employed totaled $3,582,000.

A summary of employment and pay-roll data in the regular Federal services and on projects financed wholly or partially from Federal funds is given in table 2.

TABLE 2.—*Summary of Employment and Pay Rolls in Regular Federal Services and on Projects Financed Wholly or Partially from Federal Funds, February 1941 (Preliminary Figures)*

Class	Employment			Pay rolls		
	February 1941	January 1941	Percentage change	February 1941	January 1941	Percentage change
Federal services:						
Executive [1]	1,173,663	1,151,148	+2.0	$175,644,562	$178,218,064	−1.4
Judicial	2,498	2,507	−.4	673,822	641,218	+5.1
Legislative	5,921	5,985	−1.1	1,312,368	1,313,550	−.1
Military	1,144,674	957,624	+19.5	69,324,619	59,513,595	+16.5
Construction projects:						
Financed by regular Federal appropriations	870,697	785,679	+10.8	111,932,852	100,963,826	+10.9
Defense	730,084	630,876	+15.7	97,105,709	85,009,616	+14.2
Other	140,613	154,803	−9.2	14,827,143	15,954,210	−7.1
USHA low-rent housing	41,448	41,856	−1.0	3,999,687	4,099,175	−2.4
Defense	6,103	5,184	+17.7	592,354	464,105	+27.6
Other	35,345	36,672	−3.6	3,407,333	3,635,070	−6.3
Financed by PWA [2]	14,683	16,889	−13.1	1,756,295	1,884,319	−7.8
Financed by RFC [3]	3,570	3,010	+18.6	413,258	295,380	+39.9
Defense	1,808	1,200	+50.7	202,672	109,874	+84.5
Other	1,762	1,810	−2.7	210,586	185,506	+13.5
Federal agency projects financed by Work Projects Administration	65,323	65,020	+.5	3,581,772	3,184,808	+12.5
Defense	28,364	26,651	+6.4	1,700,239	1,284,695	+32.3
Other	36,959	38,369	−4.7	1,881,533	1,900,113	−1.0
Projects operated by WPA	1,836,995	1,841,302	−.2	92,445,040	101,641,783	−9.1
Defense	463,151	453,730	+2.1	(4)	(4)	
Other	1,373,844	1,387,572	−1.0	(4)	(4)	
National Youth Administration:						
Student work program	460,587	443,900	+3.8	3,175,708	2,767,868	+14.7
Out-of-school work program	488,398	424,812	+15.0	9,289,872	7,965,225	+16.6
Civilian Conservation Corps	312,082	298,159	+4.7	13,730,562	13,327,945	+3.0

[1] Includes force-account and supervisory and technical employees shown under other classifications to the extent of 166,029 employees and pay-roll disbursements of $23,385,412 for February 1941, and 164,182 employees and pay-roll disbursements of $23,109,193 for January 1941.

[2] Data covering PWA projects financed from National Industrial Recovery Act funds, Emergency Relief Appropriation Acts of 1935, 1936, 1937 funds, and Public Works Administration Appropriation Act of 1938 funds are included. These data are not shown under projects financed by the Work Projects Administration. Includes 2,875 wage earners and $326,396 pay roll for February 1941; 3,122 wage earners and $339,456 pay roll for January 1941, covering Public Works Administration Projects Financed from Emergency Relief Appropriation Acts of 1935, 1936, and 1937 funds. Includes 11,323 wage earners and $1,387,837 pay roll for February 1941; 12,955 wage earners and $1,484,674 pay roll for January 1941, covering Public Works Administration projects financed from funds provided by the Public Works Administration Appropriation Act of 1938.

[3] Includes 697 employees and pay-roll disbursements of $94,289 for February 1941; 586 employees and pay-roll disbursements of $62,106 for January 1941 on projects financed by the RFC Mortgage Co.

[4] Pay-roll data not available.

Increased employment was reported on both programs financed by the National Youth Administration. The student-work program showed an increase of 17,000 and the out-of-school work program a gain of 64,000. Pay rolls on the student-work program were $3,176,000 and on the out-of-school work program $9,290,000.

Approximately 14,000 additional persons were given employment in camps of the Civilian Conservation Corps in February. Of the 312,100 persons on the pay roll, 277,950 were enrollees; 1,500, educational advisers; 150, nurses; and 32,500, supervisory and technical employees. Pay rolls of $13,731,000 were $403,000 greater than in January.

In the regular services of the Federal Government, employment increases were reported in the executive and military branches while decreases were reported in the judicial and legislative branches. Of the 1,174,000 employees in the executive service 162,000 were working in the District of Columbia and 1,012,000 outside the District. Force-account employees (employees on the pay roll of the U. S. Government who are engaged on construction projects, and whose period of employment terminates as the project is completed) were 11 percent of the total number of employees in the executive service.

A slight seasonal decline in employment occurred on State-financed road projects. Of the 121,000 on the pay roll, 22,000 were engaged in the construction of new roads and 99,000 on maintenance. Wage payments of $9,473,000 were $1,099,000 less than in January.

DETAILED REPORTS FOR JANUARY 1941

A MONTHLY report on employment and pay rolls is published as a separate pamphlet by the Bureau of Labor Statistics. This gives detailed data regarding employment, pay rolls, working hours, and earnings for the current month for industrial and business establishments and for the various forms of public employment. This pamphlet is distributed free upon request. Its principal contents for the month of January 1941, insofar as industrial and business employment is concerned, are reproduced in this section of the Monthly Labor Review.

Estimates of Nonagricultural Employment

The estimates of "Total nonagricultural employment," given on the first line of table 1, represent the total number of persons engaged in gainful work in the United States in nonagricultural industries, excluding military and naval personnel, persons employed on WPA or NYA projects, and enrollees in CCC camps. The series described as "Employees in nonagricultural establishments" also excludes proprietors and firm members, self-employed persons, casual workers, and

persons in domestic service. The estimates for "Employees in nonagricultural establishments" are shown separately for each of seven major industry groups. Tables giving figures for each group, by months, for the period from January 1929 to date are available on request.

TABLE 1.—*Estimates of Total Nonagricultural Employment, by Major Groups*

[In thousands]

Industry	January 1941 (preliminary)	December 1940	Change December 1940 to January 1941	January 1940	Change January 1940 to January 1941
Total civil nonagricultural employment [1]	36,359	37,299	−940	34,475	+1,884
Employees in nonagricultural establishments [2]	30,216	31,156	−940	28,332	+1,884
Manufacturing	10,495	10,553	−58	9,698	+797
Mining	845	855	−10	853	−8
Construction	1,618	1,714	−96	1,012	+606
Transportation and public utilities	3,010	3,039	−29	2,935	+75
Trade	6,187	6,884	−697	6,062	+125
Finance, service, and miscellaneous	4,140	4,180	−40	4,078	+62
Federal, State, and local government:					
Civil employees	3,921	3,931	−10	3,694	+227
Military and naval forces [3]	958	884	+74	435	+523

[1] Revised series—Excludes military and naval forces. Also excludes employees on WPA and NYA projects, as well as enrollees in CCC camps. Includes proprietors, firm members, self-employed persons, casual workers, and domestic servants.

[2] Excludes all of the groups omitted from "total nonagricultural employment" as well as proprietors, firm members, self-employed persons, casual workers, and domestic servants.

[3] Not included in totals shown above. Includes members of the National Guard inducted into the Federal service by act of Congress.

The figures represent the number of persons working at any time during the week ending nearest the middle of each month. The totals for the United States have been adjusted to conform to the figures shown by the 1930 Census of Occupations for the number of nonagricultural "gainful workers" less the number shown to have been unemployed for 1 week or more at the time of the census. Separate estimates for "Employees in nonagricultural establishments" are shown in table 2 for each of the 48 States and the District of Columbia for December 1940 and January 1941 and January 1940. Tables showing monthly figures for each State from January 1938 to date are available on request. Because the State figures do not include employees on merchant vessels, and because of certain adjustments in the United States estimates which have not been made on a State basis, the total of the State estimates will not agree exactly with the figure for the United States as a whole.

These estimates are based in large part on industrial censuses and on regular reports of employers to the United States Bureau of Labor Statistics and to other Government agencies, such as the Interstate Commerce Commission. Data derived from employers' quarterly reports in connection with "old age and survivors' insurance," and employers' monthly reports in connection with unemployment compensation have been used extensively as a check on estimates derived from other sources, and in some industries they have provided the most reliable information available.

TABLE 2.—*Estimated Number of Employees in Nonagricultural Establishments, by States*

[Excludes proprietors, firm members, self-employed persons, casual workers, domestic workers, the armed forces of the United States, and employees on merchant vessels]

[In thousands]

Geographic divisions and State	January 1941 (preliminary)	December 1940	Change December 1940 to January 1941		January 1940	Change January 1940 to January 1941	
			Number	Percentage		Number	Percentage
New England	**2,660**	**2,725**	**−65**	**−2.4**	**2,439**	**+221**	**+9.1**
Maine	185	188	−3	−1.4	182	+3	+1.7
New Hampshire	130	133	−3	−2.8	123	+7	+5.2
Vermont	71	73	−2	−3.1	70	+1	+.9
Massachusetts	1,406	1,445	−39	−2.7	1,284	+122	+9.5
Rhode Island	242	250	−8	−3.0	223	+19	+8.8
Connecticut	626	636	−10	−1.5	557	+69	+12.3
Middle Atlantic	**7,833**	**8,057**	**−224**	**−2.8**	**7,466**	**+367**	**+4.9**
New York	3,895	4,011	−116	−2.9	3,780	+115	+3.0
New Jersey	1,189	1,216	−27	−2.2	1,098	+91	+8.2
Pennsylvania	2,749	2,830	−81	−2.8	2,588	+161	+6.2
East North Central	**7,038**	**7,249**	**−211**	**−2.9**	**6,539**	**+499**	**+7.7**
Ohio	1,835	1,878	−43	−2.3	1,706	+129	+7.6
Indiana	803	836	−33	−3.9	739	+64	+8.7
Illinois	2,285	2,361	−76	−3.2	2,153	+132	+6.2
Michigan	1,467	1,508	−41	−2.7	1,335	+132	+9.9
Wisconsin	648	666	−18	−2.6	606	+42	+7.1
West North Central	**2,326**	**2,419**	**−93**	**−3.9**	**2,238**	**+88**	**+3.9**
Minnesota	509	537	−28	−5.4	496	+13	+2.6
Iowa	396	409	−13	−3.3	386	+10	+2.5
Missouri	767	795	−28	−3.6	743	+24	+3.2
North Dakota	73	75	−2	−2.3	71	+2	+3.2
South Dakota	81	83	−2	−2.4	78	+3	+4.8
Nebraska	192	201	−9	−4.6	189	+3	+1.2
Kansas	308	319	−11	−3.4	275	+33	+11.9
South Atlantic	**3,732**	**3,802**	**−70**	**−1.9**	**3,391**	**+341**	**+10.0**
Delaware	71	73	−2	−3.6	66	+5	+7.1
Maryland	544	553	−9	−1.7	479	+65	+13.6
District of Columbia	386	374	+12	+3.3	321	+65	+20.1
Virginia	519	534	−15	−2.8	470	+49	+10.5
West Virginia	375	382	−7	−1.8	365	+10	+2.9
North Carolina	617	638	−21	−3.4	580	+37	+6.4
South Carolina	296	305	−9	−3.0	276	+20	+7.1
Georgia	500	514	−14	−2.8	460	+40	+8.6
Florida	424	429	−5	−1.3	374	+50	+13.3
East South Central	**1,416**	**1,449**	**−33**	**−2.3**	**1,296**	**+120**	**+9.3**
Kentucky	370	377	−7	−2.0	354	+16	+4.3
Tennessee	455	468	−13	−2.9	420	+35	+8.4
Alabama	392	400	−8	−1.9	351	+41	+11.8
Mississippi	199	204	−5	−2.1	171	+28	+16.6
West South Central	**1,942**	**2,011**	**−69**	**−3.4**	**1,754**	**+188**	**+10.8**
Arkansas	189	194	−5	−2.4	173	+16	+9.6
Louisiana	425	442	−17	−3.8	359	+66	+18.4
Oklahoma	288	298	−10	−3.1	278	+10	+3.7
Texas	1,040	1,077	−37	−3.5	944	+96	+10.2
Mountain	**754**	**784**	**−30**	**−4.1**	**723**	**+31**	**+4.1**
Montana	110	113	−3	−3.3	105	+5	+4.6
Idaho	81	86	−5	−6.6	78	+3	+2.9
Wyoming	52	53	−1	−1.8	47	+5	+9.6
Colorado	212	223	−11	−5.2	207	+5	+2.1
New Mexico	69	72	−3	−3.7	68	+1	+2.1
Arizona	91	91	0	(1)	88	+3	+3.3
Utah	107	113	−6	−5.7	100	+7	+6.7
Nevada	32	33	−1	−3.2	30	+2	+9.2
Pacific	**2,455**	**2,527**	**−72**	**−2.8**	**2,248**	**+207**	**+9.2**
Washington	427	440	−13	−2.8	390	+37	+9.5
Oregon	236	243	−7	−2.6	218	+18	+8.2
California	1,792	1,844	−52	−2.8	1,640	+152	+9.2

[1] Less than 1/10 of 1 percent.

Industrial and Business Employment

Monthly reports on employment and pay rolls are available for 157 manufacturing industries; 16 nonmanufacturing industries, including private building construction; water transportation; and class I steam railroads. The reports for the first 2 of these groups—manufacturing and nonmanufacturing—are based on sample surveys by the Bureau of Labor Statistics. The figures on water transportation are based on estimates prepared by the Maritime Commission and those on class I steam railroads are compiled by the Interstate Commerce Commission. They are presented in the foregoing summary.

The indexes of factory employment and pay rolls are based on the 3-year average 1923–25 as 100 and are adjusted to 1937 census data, except for the aircraft industry and the transportation equipment group, which have been adjusted on the basis of a complete employment survey of the aircraft industry made by the Bureau of Labor Statistics for August 1940, and for all manufacturing industries combined, the durable-goods group, and the nondurable-goods group, which have been adjusted to preliminary 1939 census figures. They relate to wage earners only and are computed from reports supplied by representative manufacturing establishments in 90 of the 157 manufacturing industries surveyed. These reports cover more than 55 percent of the total wage earners in all manufacturing industries of the country and more than 65 percent of the wage earners in the 90 industries covered.

The indexes for the nonmanufacturing industries are based on the 12-month average for 1929 as 100. Figures for mining, laundries, and dyeing and cleaning cover wage earners only, but the figures for public utilities, trade, and hotels relate to all employees except corporation officers, executives, and other employees whose duties are mainly supervisory. For crude-petroleum production they cover wage earners and clerical field force. The coverage of the reporting samples for the various nonmanufacturing industries ranges from approximately 25 percent for wholesale and retail trade, dyeing and cleaning, and insurance, to approximately 80 percent for quarrying and nonmetallic mining, anthracite mining, and public utilities.

The indexes for retail trade have been adjusted to conform in general with the 1935 Census of Retail Distribution and are weighted by lines of trade. For the public utilities they have been adjusted to the 1937 Census of Electrical Industries, for wholesale trade to the 1933 census, and for coal mining, year-round hotels, laundries, and dyeing and cleaning to the 1935 censuses.

Data for both manufacturing and nonmanufacturing industries are based on reports of the number of employees and the amount of pay rolls for the pay period ending nearest the 15th of the month.

The average weekly earnings shown in table 3 are computed by dividing the total weekly pay rolls in the reporting establishments by the total number of full- and part-time employees reported. As not all reporting establishments supply man-hours, average hours worked per week and average hourly earnings are necessarily based on data furnished by a smaller number of reporting firms. The size and composition of the reporting sample vary slightly from month to month. Therefore, the average hours per week, average hourly earnings, and average weekly earnings shown may not be strictly comparable from month to month. The sample, however, is believed to be sufficiently adequate in virtually all instances to indicate the general movement of earnings and hours over the period shown. The changes from the preceding month, expressed as percentages, are based on identical lists of firms for the 2 months, but the changes from January 1940 are computed from chain indexes based on the month-to-month percentage changes.

EMPLOYMENT AND PAY-ROLL INDEXES, AVERAGE HOURS, AND AVERAGE EARNINGS

The indexes of employment and pay rolls as well as average hours worked per week, average hourly earnings, and average weekly earnings in manufacturing and nonmanufacturing industries for November and December 1940, and January 1941, where available, are presented in table 3. The November and December figures, where given, may differ in some instances from those previously published because of revisions necessitated primarily by the inclusion of late reports.

In table 4 indexes of employment and pay rolls are given for all manufacturing industries combined, for the durable- and nondurable-goods groups of manufacturing industries, and for each of 13 nonmanufacturing industries, by months, from January 1940 to January 1941, inclusive. The indexes for all manufacturing industries combined, the durable-goods group, and the nondurable-goods group have been adjusted to preliminary 1939 census figures. Comparable indexes for all available months and years back to January 1919 are given in tables 9, 10, and 11 of the December 1940 issue of the pamphlet, "Employment and Pay Rolls." The accompanying chart indicates the trend of factory employment and pay rolls from January 1919 to January 1941.

TABLE 3.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries*

MANUFACTURING

[Indexes are based on 3-year average, 1923–25=100. For "all manufacturing," "durable goods," and "nondurable goods," they have been adjusted to preliminary 1939 census figures.[2] The indexes for all other manufacturing groups and industries except "automobiles" have been adjusted to 1937 census figures and are not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request.]

Industry	Employment index			Pay-roll index			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940
													Cents	*Cents*	*Cents*
All manufacturing [1]	**115.5**	**116.2**	**114.7**	**120.7**	**122.4**	**116.4**	**$27.69**	**$27.89**	**$26.93**	**39.0**	**39.8**	**38.6**	**68.9**	**68.3**	**67.8**
Durable goods [2]	**118.3**	**117.6**	**115.5**	**131.9**	**131.6**	**125.1**	**31.90**	**31.96**	**31.11**	**40.6**	**41.2**	**40.2**	**75.8**	**74.9**	**74.4**
Nondurable goods [2]	**112.7**	**114.9**	**113.9**	**108.0**	**112.1**	**106.6**	**22.61**	**23.09**	**22.08**	**37.3**	**38.4**	**37.1**	**62.0**	**61.7**	**61.3**
Durable goods															
Iron and steel and their products, not including machinery	**122.1**	**121.5**	**119.3**	**130.7**	**133.0**	**125.8**	**31.49**	**32.18**	**31.01**	**39.8**	**41.6**	**39.6**	**78.6**	**78.0**	**78.1**
Blast furnaces, steel works, and rolling mills	131.3	129.5	127.3	139.9	142.1	134.6	33.66	34.65	33.43	39.1	40.4	39.1	86.2	85.8	85.7
Bolts, nuts, washers, and rivets	138.9	134.7	128.1	170.5	178.0	161.5	29.58	31.82	30.30	41.9	44.4	42.4	70.6	71.7	71.5
Cast-iron pipe	87.6	87.4	86.3	93.2	97.1	89.2	25.42	26.29	24.57	40.1	42.8	40.6	62.6	61.2	60.3
Cutlery (not including silver and plated cutlery) and edge tools	107.7	109.8	112.2	106.9	113.7	107.5	25.90	27.11	25.13	40.5	42.2	40.4	65.2	65.3	63.5
Forgings, iron and steel	91.1	88.4	83.3	123.6	118.8	106.2	36.61	36.28	34.39	44.6	44.7	42.4	82.5	81.7	81.7
Hardware	112.8	112.5	109.0	130.4	128.4	122.3	28.30	28.03	27.56	40.8	41.2	40.4	69.5	68.1	68.3
Plumbers' supplies	98.0	96.5	94.1	90.8	93.1	88.2	26.91	28.04	27.18	38.0	39.8	38.8	70.3	70.4	70.0
Stamped and enameled ware	188.6	196.1	190.2	213.4	225.7	209.3	26.59	26.94	25.76	39.5	40.9	38.9	66.8	66.1	66.2
Steam and hot-water heating apparatus and steam fittings	102.7	102.6	102.2	105.3	105.0	103.4	30.98	31.04	30.65	42.5	43.0	42.2	73.2	72.3	72.8
Stoves	94.5	103.9	105.5	87.1	100.3	100.7	26.07	27.37	27.14	38.7	40.4	40.1	67.8	68.2	68.2
Structural and ornamental metalwork	93.4	90.4	86.5	89.0	86.0	78.7	30.75	30.80	29.26	41.7	41.6	40.0	74.2	74.3	73.2
Tin cans and other tinware	99.8	98.9	100.2	112.4	113.2	104.1	25.29	25.59	23.47	39.8	40.5	37.0	63.2	63.5	63.5
Tools (not including edge tools, machine tools, files, and saws)	120.9	116.5	111.6	140.1	136.1	124.0	29.01	29.24	27.82	44.8	45.4	43.4	65.6	65.0	64.3
Wirework	205.5	206.8	203.5	237.7	242.0	235.1	28.27	28.68	28.45	39.7	41.1	40.7	71.2	69.8	69.9
Machinery, not including transportation equipment	**139.9**	**136.0**	**131.2**	**167.5**	**162.9**	**149.3**	**33.34**	**33.13**	**31.65**	**43.2**	**43.6**	**42.0**	**76.8**	**76.1**	**75.2**
Agricultural implements (including tractors)	149.6	143.2	136.6	180.9	171.3	160.4	32.22	31.87	31.29	39.7	39.5	39.0	81.3	81.0	80.6
Cash registers, adding machines, and calculating machines	135.6	134.7	133.6	151.3	147.8	144.0	34.78	34.15	33.77	41.4	41.1	40.6	84.9	84.1	83.9
Electrical machinery, apparatus, and supplies	130.1	125.6	120.6	163.0	157.5	145.0	33.00	32.93	31.61	42.8	43.0	41.9	77.3	76.6	75.7
Engines, turbines, water wheels, and windmills [3]	223.2	211.8	201.0	331.4	305.5	275.0	39.12	38.17	36.21	45.3	45.4	43.2	86.6	84.2	84.0
Foundry and machine-shop products	117.4	114.1	110.1	128.7	126.6	114.6	32.51	32.85	30.95	42.9	43.6	41.6	75.7	75.5	74.5
Machine tools	226.2	226.0	205.0	414.0	394.2	355.4	40.06	39.56	36.85	50.4	50.6	48.0	79.4	78.1	76.8

Engines, turbines, water wheels, and windmills [3]	223.2	211.8	201.0	331.4	305.5	275.0	39.12	38.17	36.21	45.3	45.4	43.2	86.6	84.2	84.0
Foundry and machine-shop products	117.4	114.1	110.1	128.7	126.6	114.6	32.51	32.85	30.95	42.9	43.6	41.6	75.7	75.5	74.5
Machine tools	286.2	276.0	265.9	414.0	394.2	355.4	40.08	39.56	36.85	50.4	50.6	48.0	79.6	78.1	76.8
Radios and phonographs	147.0	158.0	159.4	144.3	162.9	155.7	24.08	25.49	23.97	38.2	40.5	39.2	63.7	63.0	61.3
Textile machinery and parts	89.3	86.1	82.7	97.9	90.6	80.1	30.13	28.94	26.56	44.6	42.8	39.9	67.7	67.8	66.7
Typewriters and parts	130.8	132.2	130.7	141.0	147.3	166.0	26.40	27.31	31.13	39.1	41.7	45.5	67.5	65.4	68.4
Transportation equipment [4]	**152.6**	**149.2**	**146.0**	**176.1**	**169.2**	**166.1**	**36.56**	**35.96**	**36.39**	**40.4**	**40.2**	**40.4**	**91.1**	**90.0**	**90.2**
Aircraft [4]	5,031.2	4,684.1	4,402.3	5,912.2	5,356.3	5,012.9	34.13	33.17	32.93	44.7	44.6	44.3	77.6	75.6	75.5
Automobiles	128.3	129.3	129.5	147.5	144.8	150.5	37.61	36.54	38.11	39.0	38.5	39.9	96.6	95.0	95.5
Cars, electric- and steam-railroad*	69.3	66.0	61.6	63.5	62.3	53.7	29.21	30.08	27.73	38.1	39.8	37.9	76.8	75.6	73.5
Locomotives	49.4	45.7	42.2	55.0	50.1	43.6	34.13	33.55	31.61	42.5	41.9	40.0	80.3	80.0	79.0
Shipbuilding*	240.0	221.0	204.2	307.6	288.0	238.7	37.81	38.50	34.63	42.1	42.7	38.6	89.4	89.7	88.5
Nonferrous metals and their products	**131.2**	**131.2**	**129.9**	**146.2**	**149.8**	**141.7**	**30.62**	**31.63**	**30.02**	**41.4**	**42.7**	**41.4**	**74.1**	**73.8**	**72.7**
Aluminum manufactures	212.6	208.6	209.6	265.5	264.0	259.0	30.40	30.90	30.01	40.9	42.0	41.3	74.3	73.5	72.7
Brass, bronze, and copper products	171.5	168.1	162.4	220.6	219.3	201.6	35.18	35.74	33.98	44.0	44.5	42.6	80.4	80.5	79.9
Clocks and watches and time-recording devices	106.3	106.2	106.7	115.0	119.6	121.7	23.90	24.88	25.20	38.9	40.8	41.6	61.4	61.0	60.6
Jewelry*	96.6	104.6	110.5	82.4	97.4	94.4	22.92	25.00	22.97	38.5	41.5	39.6	58.9	59.6	57.4
Lighting equipment*	108.0	110.2	109.8	98.6	102.0	100.0	28.19	28.59	28.18	39.3	40.7	41.1	71.7	70.2	68.6
Silverware and plated ware	74.7	78.9	79.8	70.8	86.5	82.6	27.37	31.62	29.91	41.4	46.8	44.7	66.6	68.0	67.4
Smelting and refining—copper, lead, and zinc	97.8	96.6	94.8	101.4	102.6	95.8	29.30	29.92	28.46	38.6	40.1	38.4	75.2	74.6	74.0
Lumber and allied products	**71.3**	**73.7**	**74.4**	**68.1**	**71.5**	**70.9**	**20.72**	**21.06**	**20.75**	**38.9**	**39.5**	**38.9**	**52.9**	**52.8**	**52.6**
Furniture	93.7	97.4	97.0	84.2	92.6	90.4	21.42	22.64	22.23	39.0	41.0	40.2	55.2	55.2	55.5
Lumber:															
Millwork	70.4	71.6	71.3	57.7	59.7	58.2	22.51	23.01	22.58	40.5	41.7	41.2	55.4	55.0	54.7
Sawmills	62.5	64.7	66.1	59.2	60.4	60.9	19.59	19.29	19.06	38.4	38.0	37.7	51.0	50.7	50.5
Stone, clay, and glass products	**85.8**	**88.7**	**88.6**	**79.4**	**85.6**	**82.0**	**25.12**	**26.25**	**25.17**	**36.5**	**38.2**	**37.1**	**68.4**	**68.0**	**67.1**
Brick, tile, and terra cotta	64.8	65.2	64.8	54.6	56.8	54.0	21.74	22.52	21.47	36.9	38.5	37.4	58.7	58.2	57.2
Cement	64.8	71.7	73.9	61.1	72.4	72.9	26.82	28.70	27.96	37.9	40.5	39.5	70.9	70.9	70.7
Glass	114.3	116.8	117.0	131.2	137.6	130.8	28.00	28.77	27.26	36.4	37.7	36.6	77.0	76.4	74.6
Marble, granite, slate, and other products	38.8	45.1	46.3	26.8	33.3	31.9	23.99	25.72	23.96	34.5	36.5	34.0	70.3	71.1	70.8
Pottery	104.6	105.6	102.4	94.4	101.3	96.3	23.03	24.47	24.00	35.7	38.1	37.6	64.9	63.8	63.6
Nondurable goods															
Textiles and their products	**106.4**	**107.0**	**105.5**	**95.1**	**97.6**	**92.3**	**18.12**	**18.46**	**17.80**	**35.7**	**36.7**	**35.5**	**51.2**	**50.7**	**50.4**
Fabrics	99.7	100.4	98.7	93.1	95.6	90.9	17.93	18.28	17.71	36.9	37.9	36.8	49.2	48.8	48.7
Carpets and rugs	82.1	82.4	81.6	74.7	76.2	73.1	25.18	25.64	24.80	37.4	37.9	36.6	67.4	67.6	67.9
Cotton goods	100.7	100.5	98.1	96.9	98.0	92.3	15.60	15.70	15.23	37.2	38.0	36.9	41.9	41.3	41.2
Cotton small wares	91.6	89.6	87.3	92.7	91.5	87.1	19.74	19.87	19.39	39.3	39.9	39.1	50.3	49.8	49.7
Dyeing and finishing textiles	134.9	134.3	132.0	120.2	121.0	113.5	21.65	21.94	21.07	39.3	40.2	38.6	55.1	54.6	54.3
Hats, fur-felt	82.3	83.9	81.9	80.0	81.5	72.6	26.93	26.78	24.49	35.9	35.6	33.6	74.9	74.7	72.8
Hosiery	142.9	146.2	144.9	148.9	160.4	160.4	18.44	19.57	19.67	33.7	35.7	36.0	55.0	54.9	54.7
Knitted outerwear	66.2	71.4	73.2	56.0	61.5	63.5	17.65	17.89	18.15	35.8	36.4	36.9	48.9	48.2	48.4
Knitted underwear	76.9	77.4	76.5	73.4	74.2	72.5	16.06	16.14	16.02	36.0	36.6	36.3	44.6	44.1	44.2
Knitted cloth	139.7	147.5	150.0	125.0	129.8	129.5	19.90	19.64	19.24	37.9	39.3	38.7	50.3	50.0	49.5
Silk and rayon goods	65.0	65.3	65.2	52.6	54.4	52.2	16.53	17.13	16.43	35.7	37.3	36.0	46.1	45.8	45.4
Woolen and worsted goods	99.9	100.9	98.7	93.6	96.3	88.9	21.78	22.15	20.92	37.9	38.9	36.8	57.6	56.9	56.9

See footnotes at end of table.

TABLE 3.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries*—Continued

MANUFACTURING—Continued

[Indexes are based on 3-year average, 1923–25=100. For "all manufacturing," "durable goods," and "nondurable goods," they have been adjusted to preliminary 1939 census figures.[2] The indexes for all other manufacturing groups and industries except "automobiles" have been adjusted to 1937 census figures and are not comparable to indexes published in pamphlets prior to August 1939. Comparable series available upon request.]

Industry	Employment index			Pay-roll index			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940
Nondurable goods—Continued															
Textiles and their products—Continued.													*Cents*	*Cents*	*Cents*
Wearing apparel	116.8	117.2	116.2	93.2	95.6	89.5	$18.70	$18.98	$18.05	33.3	34.3	33.0	55.2	54.4	53.9
Clothing, men's	109.5	108.1	104.8	87.3	86.4	76.4	20.36	20.42	18.70	33.5	33.7	31.1	60.5	60.4	60.1
Clothing, women's	161.5	164.2	165.3	119.5	125.5	119.6	19.47	20.09	18.98	33.2	34.7	33.7	55.3	54.2	53.4
Corsets and allied garments	112.0	112.8	113.2	115.8	122.6	121.1	17.24	18.23	17.95	35.6	37.3	36.1	48.2	48.5	48.5
Men's furnishings**	107.5	123.3	127.8	103.2	133.2	139.6	14.33	16.17	16.43	33.3	36.5	37.2	42.2	43.0	43.1
Millinery	74.9	60.8	60.9	55.2	41.5	40.9	22.04	20.39	20.07	30.5	29.7	28.6	64.6	63.6	66.1
Shirts and collars	118.7	122.1	120.6	103.9	115.0	112.8	13.71	14.75	14.77	33.1	35.0	34.8	42.1	41.9	41.7
Leather and its manufactures*	**93.4**	**90.6**	**87.0**	**83.3**	**78.5**	**68.5**	**20.67**	**20.05**	**18.19**	**37.3**	**36.5**	**33.0**	**55.5**	**55.2**	**55.5**
Boots and shoes*	91.4	88.0	84.1	80.1	73.2	62.5	19.58	18.54	16.65	37.0	35.7	31.8	53.0	52.6	52.9
Leather	85.8	85.8	83.9	86.7	89.5	82.8	25.27	26.16	24.57	38.3	39.9	37.9	66.2	65.9	65.8
Food and kindred products	**121.2**	**130.5**	**132.5**	**120.0**	**132.4**	**128.8**	**24.91**	**25.78**	**24.43**	**39.0**	**40.6**	**39.3**	**64.9**	**64.1**	**63.2**
Baking	140.5	144.1	145.5	134.5	137.7	138.3	26.44	26.39	26.31	41.1	41.0	41.0	64.3	64.4	64.0
Beverages	255.8	260.2	263.0	288.5	299.4	302.3	32.96	33.60	33.61	37.2	38.0	38.0	89.1	88.7	89.3
Butter	91.6	96.4	99.4	80.1	84.1	82.3	22.84	22.89	21.77	44.6	45.5	44.3	50.9	49.7	48.7
Canning and preserving	90.5	103.3	123.2	78.9	92.7	100.6	16.73	17.09	15.54	32.9	34.4	33.4	51.3	51.0	48.0
Confectionery	86.7	100.5	102.4	86.7	103.0	100.1	19.27	19.86	19.05	37.6	40.2	38.7	52.1	49.8	49.5
Flour	76.9	77.8	79.0	72.2	72.8	72.3	25.27	25.12	24.59	41.0	40.7	40.2	60.8	60.8	60.9
Ice cream	67.9	69.3	70.9	59.1	60.9	61.0	29.85	30.15	29.61	44.1	44.7	43.7	66.6	65.8	65.8
Slaughtering and meat packing	116.3	125.0	116.2	119.7	137.3	118.9	26.84	28.77	26.82	39.3	42.3	39.0	68.1	68.0	68.6
Sugar, beet	95.9	235.8	277.0	84.7	265.1	288.0	22.85	29.07	26.81	36.7	53.2	49.3	64.0	56.2	55.1
Sugar refining, cane	87.6	94.3	93.5	70.3	85.0	83.7	22.73	25.53	25.36	35.0	38.9	39.5	65.0	65.6	64.1
Tobacco manufactures	**60.8**	**65.6**	**66.8**	**59.3**	**67.4**	**66.4**	**17.76**	**18.70**	**18.14**	**35.7**	**38.1**	**37.2**	**49.8**	**49.0**	**48.6**
Chewing and smoking tobacco, and snuff	57.7	57.4	55.8	66.5	69.8	66.5	18.60	19.60	19.21	34.9	37.0	35.0	53.7	53.5	54.9
Cigars and cigarettes	61.1	66.6	68.1	58.3	67.0	66.3	17.57	18.53	17.95	35.8	38.2	37.4	49.3	48.5	47.9
Paper and printing	**117.0**	**119.9**	**118.5**	**115.5**	**120.8**	**115.4**	**29.64**	**30.37**	**29.35**	**38.6**	**39.3**	**38.4**	**79.6**	**79.9**	**79.3**
Boxes, paper	118.4	125.2	126.1	131.8	145.4	144.0	22.32	23.19	22.79	38.8	41.2	40.4	57.8	56.6	56.5
Paper and pulp	115.7	115.9	115.7	127.5	128.5	123.8	26.99	27.30	26.35	40.8	41.3	40.2	66.2	66.0	65.6
Printing and publishing:															
Book and job	103.6	105.3	102.5	95.1	97.9	90.1	31.87	32.28	30.62	39.8	39.9	38.2	81.2	81.3	81.2
Newspapers and periodicals*	115.4	119.8	118.1	108.2	116.1	112.4	38.09	39.36	38.57	35.7	36.4	35.7	104.9	106.0	104.9
Chemicals, petroleum, and coal products	**126.1**	**125.8**	**125.6**	**142.1**	**144.3**	**139.7**	**30.39**	**30.90**	**29.87**	**38.9**	**39.6**	**38.8**	**76.9**	**76.6**	**76.5**
Petroleum refining	119.1	119.8	120.7	132.2	139.0	133.3	34.46	36.00	34.32	35.7	37.3	35.7	97.0	96.8	96.6

Printing and publishing:																
Book and job	103.6	105.3	102.5	95.1	97.9	90.1	31.87	32.28	30.62	39.8	39.9	38.2	81.2	87.3	79.2
Newspapers and periodicals*	115.4	119.8	118.1	108.2	116.1	112.4	38.09	39.36	38.57	35.7	36.4	35.7	104.9	106.0	104.9
Chemicals, petroleum, and coal products	**126.1**	**125.8**	**125.6**	**142.1**	**144.3**	**139.7**	**30.39**	**30.90**	**29.87**	**38.9**	**39.6**	**38.8**	**76.9**	**76.6**	**76.5**
Petroleum refining	119.1	119.8	120.7	132.2	139.0	133.3	34.46	36.00	34.32	35.7	37.3	35.7	97.0	96.8	96.6
Other than petroleum refining	127.8	127.2	126.7	145.2	145.9	141.7	28.88	28.92	28.23	39.9	40.4	39.8	70.4	70.1	69.6
Chemicals	152.0	149.9	148.0	188.2	187.9	181.7	33.10	33.33	32.72	40.3	40.8	40.4	82.2	81.6	81.1
Cottonseed—oil, cake, and meal	115.6	129.1	132.8	113.7	131.1	128.8	15.79	16.31	15.50	45.3	47.5	45.1	33.9	33.5	33.3
Druggists' preparations	116.4	115.8	116.2	131.1	130.7	131.1	25.35	25.42	25.44	39.7	39.5	39.5	61.1	61.2	61.3
Explosives [5]	150.7	148.9	147.2	198.8	199.1	186.5	35.97	36.49	34.56	40.5	41.4	39.8	88.9	88.1	86.8
Fertilizers	104.2	95.0	92.2	85.9	80.9	77.1	14.94	15.47	15.31	34.7	35.4	33.9	42.9	43.7	45.2
Paints and varnishes	126.3	126.0	125.9	137.4	138.7	135.7	29.86	30.15	29.39	40.3	40.8	40.2	74.1	74.1	73.3
Rayon and allied products	313.5	315.1	314.5	335.9	334.4	331.4	27.40	27.15	26.95	39.2	39.1	39.1	69.9	69.4	69.0
Soap	85.9	84.8	84.5	107.7	106.3	100.2	29.58	29.54	27.93	40.0	40.3	38.9	74.0	73.3	71.8
Rubber products	**98.8**	**97.5**	**94.4**	**111.0**	**111.1**	**102.0**	**30.68**	**31.13**	**29.45**	**39.2**	**39.7**	**37.9**	**78.0**	**78.4**	**78.1**
Rubber boots and shoes	68.0	66.9	61.0	79.2	81.3	65.7	26.76	27.92	24.76	41.9	43.9	40.1	63.9	63.6	61.7
Rubber tires and inner tubes	77.9	76.9	75.2	96.9	96.4	89.7	36.32	36.59	34.92	38.1	37.8	36.1	95.7	97.1	97.1
Rubber goods, other	168.9	166.6	162.9	173.5	173.9	162.7	24.97	25.39	24.29	39.4	40.4	39.0	63.9	63.4	62.7

NONMANUFACTURING

[Indexes are based on 12-month average, 1929=100]

													Cents	*Cents*	*Cents*
Coal mining:													92.5	91.9	92.6
Anthracite [6 7]	50.3	50.8	50.4	38.5	42.7	37.6	$25.13	$27.60	$24.56	27.0	29.7	26.2	87.7	88.7	88.9
Bituminous [6]	89.9	90.1	89.8	86.7	91.4	84.5	25.78	27.12	25.21	29.8	31.0	28.6	74.7	74.6	74.3
Metalliferous mining	72.4	72.2	72.5	70.4	72.9	69.8	30.20	31.41	30.10	40.6	42.2	40.7	57.8	58.7	58.5
Quarrying and nonmetallic mining	41.3	45.4	47.2	36.2	42.4	42.3	21.95	23.42	22.64	38.0	40.0	38.9	88.9	89.4	88.1
Crude-petroleum production	60.2	60.7	61.3	56.5	55.9	56.8	34.61	33.96	34.11	37.9	36.9	37.8	79.7	81.1	80.7
Public utilities:													90.5	90.4	89.3
Telephone and telegraph [8 9]	80.0	79.7	79.2	103.6	103.5	103.2	31.80	31.88	32.01	40.0	39.5	39.9	73.2	73.0	72.6
Electric light and power [8 9]	90.7	91.3	91.8	105.5	106.0	106.9	35.46	35.37	35.53	39.1	39.1	39.8	76.1	75.6	74.7
Street railways and busses [8 9 10]	68.2	68.4	68.7	71.0	73.1	70.3	33.98	34.91	33.40	45.6	47.4	45.4	54.4	52.2	53.7
Trade:													52.9	52.4	52.8
Wholesale [8 11]	90.9	92.5	91.8	80.3	83.4	80.7	30.60	31.25	30.43	40.4	41.5	40.8	46.2	42.8	45.2
Retail [8 9]	91.2	108.1	96.3	84.5	97.3	87.1	21.28	20.37	20.70	42.7	42.9	42.3	56.5	54.0	55.4
Food [9]	103.6	106.4	104.6	96.8	98.8	96.7	24.57	24.45	23.76	43.4	43.4	43.1	67.5	68.3	68.7
General merchandising [8 9]	95.9	152.2	111.4	87.8	132.9	97.5	17.97	17.35	17.34	38.7	40.0	38.1	61.7	62.2	62.4
Apparel [9]	79.2	103.4	91.5	75.4	93.4	83.0	21.94	20.81	20.98	39.0	38.7	38.1	63.9	63.2	63.3
Furniture [9]	75.9	81.9	77.8	67.8	76.3	70.1	28.14	29.22	28.26	43.2	44.8	44.0			
Automotive [9]	87.5	88.0	85.9	82.5	85.2	82.3	28.47	29.29	28.94	46.4	47.4	46.7			
Lumber [9]	73.1	76.1	77.4	68.4	72.5	72.0	25.85	26.34	25.94	41.4	42.3	41.5			

See footnotes at end of table.

TABLE 3.—*Employment, Pay Rolls, Hours, and Earnings in Manufacturing and Nonmanufacturing Industries*—Continued

NONMANUFACTURING—Continued

[Indexes are based on 12-month average, 1929=100]

Industry	Employment index			Pay-roll index			Average weekly earnings [1]			Average hours worked per week [1]			Average hourly earnings [1]		
	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940	Jan. 1941	Dec. 1940	Nov. 1940
													Cents	*Cents*	*Cents*
Hotels (year-round) [6 8 12]	93.2	92.6	92.3	84.0	84.1	83.6	$15.66	$15.78	$15.75	45.5	45.7	46.1	33.9	33.9	33.6
Laundries [6]	101.3	100.3	99.7	89.8	89.2	87.2	18.30	18.36	18.13	43.0	43.2	42.3	42.6	42.6	43.1
Dyeing and cleaning [6]	101.2	103.3	106.0	73.5	75.8	77.8	19.88	20.09	20.13	42.1	42.4	41.9	48.5	48.6	49.4
Brokerage [8 13]	−0.7	+0.7	+0.1	−2.8	+3.1	+0.8	36.91	37.71	37.14	[14]	[14]	[14]	[14]	[14]	[14]
Insurance [8 13]	+.2	−.1	−.1	+1.2	+1.4	+.4	37.30	36.95	36.42	[14]	[14]	[14]	[14]	[14]	[14]
Building construction [13]	−8.5	−1.9	−4.2	−10.3	+5.6	−13.7	32.10	32.63	30.44	32.6	33.8	31.6	98.6	96.7	96.5

[1] Revised series. Mimeographed sheets giving averages by years, 1932 to 1939, inclusive, and by months, January 1938 to August 1940, inclusive, available on request. Average hours and average hourly earnings are computed from data supplied by a smaller number of establishments than average weekly earnings, as not all reporting firms furnish man-hours. The figures are not strictly comparable from month to month because of changes in the size and composition of the reporting sample.

[2] See tables 9, 10, and 11 of December 1940 Employment and Pay Rolls for comparable series back to January 1919 for all manufacturing and back to January 1923 for the durable- and nondurable-goods groups.

[3] Engines—Average weekly earnings, average weekly hours, and average hourly earnings revised as follows: July $35.04 and August $36.00; July 43.5 hours and August 44.0; July 80.7 cents, August 81.9, September 81.2, October 83.0.

[4] Revised series. Adjusted on basis of a complete employment survey made for the aircraft industry by the Bureau of Labor Statistics for August 1940. Not comparable with previously published indexes from January 1939 to August 1940, inclusive. Comparable figures for this period given in table 9 of the September 1940 issue of Employment and Pay Rolls.

[5] Because of change in class of employees covered by reporting sample, figures for explosives not comparable with those previously published for average weekly earnings and average hourly earnings (comparable October figures $34.06; 85.0 cents).

[6] Indexes adjusted to 1935 census. Comparable series back to January 1929 presented in January 1938 issue of the pamphlet.

[7] See table 7 of October 1940 Employment and Pay Rolls for revised employment and pay-roll indexes, average hours worked per week, average hourly earnings, and average weekly earnings in anthracite mining, February 1940 to September 1940, inclusive.

[8] Average weekly earnings, hourly earnings, and hours not comparable with figures published in pamphlets prior to January 1938 as they now exclude corporation officers, executives, and other employees whose duties are mainly supervisory.

[9] Retail-trade indexes adjusted to 1935 census and public-utility indexes to 1937 census. Not comparable to indexes published in pamphlets prior to January 1940 or in issues of Monthly Labor Review prior to April 1940, with but one exception, retail furniture, which has been revised since publication of July 1940 pamphlet back to January 1936. Comparable series for earlier months available upon request.

[10] Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies; formerly "electric-railroad and motorbus operation and maintenance."

[11] Indexes adjusted to 1933 census. Comparable series in November 1934 and subsequent issues of the pamphlet.

[12] Cash payments only; additional value of board, room, and tips not included.

[13] Indexes of employment and pay rolls are not available; percentage changes from preceding month substituted.

[14] Not available.

*Because of expansion in reporting sample, figures are not comparable with those previously published as indicated:

Car building.—Average weekly earnings, average weekly hours, average hourly earnings (comparable October figures $28.46; 38.2 hours, 74.8 cents).

Shipbuilding.—Average weekly earnings, average hourly earnings (comparable October figures $36.63; 87.2 cents. August hourly earnings comparable to previously published figures revised to 86.4 cents).

Jewelry.—Average weekly earnings, average weekly hours, average hourly earnings (comparable September and October figures $23.84 and $23.78; 41.8 and 41.8 hours, 56.3 and 56.2 cents).

Lighting equipment.—Average weekly earnings, average hourly earnings (comparable October figures $27.83 and 68.4 cents).

Leather group.—Average weekly earnings, average weekly hours, average hourly earnings (comparable October figures $18.87; 34.3 hours and 55.3 cents).

Boots and shoes.—Average weekly earnings, average weekly hours, average hourly earnings (comparable October figures $17.53; 33.3 hours, 52.8 cents).

Newspapers and periodicals.—Average weekly earnings, average weekly hours, and average hourly earnings (comparable October figures $38.41; 35.8 hours, 104.5 cents).

**Men's furnishings—October 1940—Average weekly earnings, average weekly hours, average hourly earnings revised to $15.84, 36.7, 40.3.

* Retail-trade indexes adjusted to 1935 census and public-utility indexes to 1937 census. Not comparable to indexes published in pamphlets prior to January 1940 or in issues of Monthly Labor Review prior to April 1940, with but one exception, retail furniture,

** Men's furnishings—October 1940—Average weekly earnings, average weekly hours, average hourly earnings revised to $15.84, 36.7, 40.3.

TABLE 4.—*Indexes of Employment and Pay Rolls in Selected Manufacturing[1] and Nonmanufacturing[2] Industries, January 1940 to January 1941, Inclusive*

Industry	1940													1941
	Av	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
	Employment													
Manufacturing														
All industries	107.5	105.0	105.0	104.4	103.2	102.5	103.1	103.2	107.4	111.4	113.8	114.7	116.2	115.5
Durable goods [3]	104.3	100.1	99.2	99.1	98.7	99.2	99.8	98.4	102.4	108.2	112.8	115.5	117.6	118.3
Nondurable goods [4]	110.6	109.7	110.5	109.5	107.5	105.6	106.2	107.8	112.2	114.4	114.8	113.9	114.9	112.7
Nonmanufacturing														
Anthracite mining [5]	50.7	51.5	51.6	52.2	51.2	51.8	49.7	50.5	49.9	49.8	49.4	50.4	50.8	50.3
Bituminous-coal mining [5]	88.0	91.8	91.7	89.7	86.2	85.1	83.8	84.9	86.6	87.7	89.2	89.8	90.1	89.9
Metalliferous mining	69.9	66.4	66.3	66.2	67.7	69.2	70.3	71.0	71.5	72.5	72.6	72.5	72.2	72.4
Quarrying and nonmetallic mining	45.3	37.8	38.3	41.0	44.5	46.9	47.9	48.1	48.5	48.9	48.8	47.2	45.4	41.3
Crude-petroleum production	62.9	63.2	63.0	63.2	63.1	63.3	63.8	63.7	63.6	63.0	62.4	61.3	60.7	60.2
Telephone and telegraph [6]	77.9	76.1	75.9	76.0	76.7	77.3	77.8	78.8	79.0	78.9	79.1	79.2	79.7	80.0
Electric light and power [6]	91.1	89.1	89.2	89.3	90.0	90.6	91.2	92.2	93.0	92.7	92.3	91.8	91.3	90.7
Street railways and busses [6 7]	68.5	68.8	68.7	68.2	68.3	68.4	68.5	68.4	68.4	68.5	68.7	68.7	68.4	68.2
Wholesale trade	90.4	90.6	90.2	90.5	89.3	88.9	89.6	89.2	90.1	90.9	91.0	91.8	92.5	90.9
Retail trade [6]	92.3	87.7	87.0	91.1	89.8	91.2	91.9	89.1	88.7	92.8	94.3	96.3	108.1	91.2
Year-round hotels [5]	92.0	91.3	92.1	92.0	92.7	93.4	92.0	90.3	90.3	91.6	93.4	92.3	92.6	93.2
Laundries [5]	99.5	96.0	95.8	96.2	97.2	99.1	102.1	102.5	102.8	101.9	100.2	99.7	100.3	101.3
Dyeing and cleaning [5]	104.7	94.0	93.7	99.5	104.5	108.7	112.6	108.2	106.7	110.0	109.4	106.0	103.3	101.2
	Pay rolls													
Manufacturing														
All industries	105.4	99.8	99.3	99.8	97.9	97.8	99.5	98.2	105.5	111.6	116.2	116.4	122.4	120.7
Durable goods [3]	107.8	99.3	97.8	98.7	98.4	98.7	101.4	97.4	106.5	115.1	123.4	125.1	131.6	131.9
Nondurable goods [4]	102.7	100.4	101.0	101.0	97.3	96.8	97.4	99.1	104.4	107.7	108.1	106.6	112.1	108.0
Nonmanufacturing														
Anthracite mining [5]	38.5	52.5	32.9	38.4	36.3	40.0	40.6	36.5	33.1	39.3	32.3	37.6	42.7	38.5
Bituminous-coal mining [5]	81.2	87.0	87.0	78.3	72.2	75.3	73.9	75.2	82.5	83.2	83.6	84.5	91.4	86.7
Metalliferous mining	66.8	63.6	64.2	63.2	63.5	65.7	65.4	63.7	68.5	69.5	71.4	69.8	72.9	70.4
Quarrying and nonmetallic mining	40.5	29.6	30.8	34.1	38.1	42.7	43.9	43.5	45.2	46.2	46.7	42.3	42.4	36.2
Crude-petroleum production	58.2	58.4	59.0	58.4	59.0	58.7	58.8	59.1	59.0	58.2	57.6	56.8	55.9	56.5
Telephone and telegraph [6]	100.2	97.4	96.9	98.1	98.7	98.8	100.0	101.3	100.4	101.8	102.2	103.2	103.5	103.6
Electric light and power [6]	104.8	101.6	102.2	102.3	103.3	104.2	104.8	105.8	108.1	105.8	107.0	106.9	106.0	105.5
Street railways and busses [6 7]	70.4	69.0	71.5	69.5	69.2	69.2	70.5	70.0	70.4	71.5	70.7	70.3	73.1	71.0
Wholesale trade	79.0	77.1	77.1	77.8	77.4	77.4	78.4	78.3	78.7	81.1	80.2	80.7	83.4	80.3
Retail trade [6]	84.2	79.9	79.1	82.0	82.3	83.4	84.8	82.6	81.5	85.1	85.8	87.1	97.3	84.5
Year-round hotels [5]	82.4	81.1	82.7	81.8	83.2	83.0	82.0	80.5	80.7	81.8	84.2	83.6	84.1	84.0
Laundries [5]	87.7	83.4	83.1	84.1	85.6	88.5	92.4	90.0	90.5	89.9	88.0	87.2	89.2	89.8
Dyeing and cleaning [5]	78.2	65.5	64.4	72.7	79.6	85.4	89.6	80.0	78.9	85.6	82.4	77.8	75.8	73.5

[1] 3-year average 1923–25=100—adjusted to Preliminary 1939 Census of Manufactures. See tables 9, 10, and 11 of December 1940 Employment and Pay Rolls for comparable figures back to January 1919 where available.

[2] 12-month average for 1929=100. Comparable indexes for wholesale trade, quarrying, metal mining, and crude-petroleum production are in November 1934 and subsequent issues of Employment and Pay Rolls, or in February 1935 and subsequent issues of Monthly Labor Review. For other nonmanufacturing indexes see notes 5 and 6.

[3] Includes: Iron and steel, machinery, transportation equipment, nonferrous metals, lumber and allied products, and stone, clay, and glass products.

[4] Includes: Textiles and their products, leather and its manufactures, food and kindred products, tobacco manufactures, paper and printing, chemicals and allied products, products of petroleum and coal, rubber products, and a number of miscellaneous industries not included in other groups.

[5] Indexes have been adjusted to the 1935 census. Comparable series from January 1929 forward are presented in January 1938 and subsequent issues of the pamphlet.

[6] Retail-trade indexes adjusted to 1935 census and public-utility indexes to 1937 census. Not comparable with indexes published in Employment and Pay Rolls pamphlets prior to January 1940 or in Monthly Labor Review prior to April 1940. Comparable series January 1929 to December 1939 available in mimeographed form.

[7] Covers street railways and trolley and motorbus operations of subsidiary, affiliated, and successor companies.

INDUSTRIAL AND BUSINESS EMPLOYMENT IN PRINCIPAL METROPOLITAN AREAS

A comparison of employment and pay rolls in December 1940 and January 1941 is made in table 5 for 13 metropolitan areas, each of which had a population of 500,000 or over in 1930. Cities within these areas but having a population of 100,000 or over are not included. Footnotes to the table specify which cities are excluded. Data concerning them have been prepared in a supplementary tabulation which is available on request. The figures represent reports from cooperating establishments and cover both full- and part-time workers in the manufacturing and nonmanufacturing industries presented in table 3, with the exception of building construction, and include also miscellaneous industries.

Revisions made in the figures after they have gone to press, chiefly because of late reports by cooperating firms, are incorporated in the supplementary tabulation mentioned above. This supplementary tabulation covers these 13 metropolitan areas as well as other metropolitan areas and cities having a population of 100,000 or more according to the 1930 Census of Population.

TABLE 5.—*Comparison of Employment and Pay Rolls in Identical Establishments in December 1940 and January 1941, by Principal Metropolitan Areas*

Metropolitan area	Number of establishments, January 1941	Number on pay roll, January 1941	Percentage change from December 1940	Amount of pay roll, (1 week), January 1941	Percentage change from December 1940
New York [1]	13,489	739,462	−6.0	$21,879,820	−4.7
Chicago [2]	4,307	500,723	−3.5	14,699,343	−3.9
Philadelphia [3]	2,401	257,796	−5.1	7,453,456	−5.9
Detroit	1,562	376,829	−2.3	13,875,554	+.9
Los Angeles [4]	2,704	209,063	−3.1	6,429,336	−1.8
Cleveland	1,275	144,247	−2.5	4,540,773	−2.4
St. Louis	1,323	144,590	−2.2	3,722,782	−3.5
Baltimore	1,106	131,176	−3.5	3,704,722	−2.2
Boston [5]	2,708	188,349	−3.6	5,001,480	−4.0
Pittsburgh	1,265	227,175	−3.0	7,208,766	−5.5
San Francisco [6]	1,638	98,291	−4.8	3,132,654	−4.8
Buffalo	750	100,416	−1.2	3,094,618	+.8
Milwaukee	974	119,561	−2.1	3,691,578	−.9

[1] Does not include Elizabeth, Jersey City, Newark, or Paterson, N. J., or Yonkers, N. Y.
[2] Does not include Gary, Ind.
[3] Does not include Camden, N. J.
[4] Does not include Long Beach, Calif.
[5] Does not include Cambridge, Lynn, or Somerville, Mass.
[6] Does not include Oakland, Calif.

WAGE-RATE CHANGES IN AMERICAN INDUSTRIES

The following table gives information concerning wage-rate adjustments occurring during the month ending January 15, 1941, as shown by reports received from manufacturing and nonmanufacturing establishments which supply employment data to this Bureau.

As the Bureau's survey does not cover all establishments in an industry, and furthermore, as some firms may have failed to report wage-rate changes, these figures should not be construed as representing the total number of wage changes occurring in manufacturing and nonmanufacturing industries.

TABLE 6.—*Wage-Rate Changes Reported by Manufacturing and Nonmanufacturing Establishments During Month Ending January 15, 1941* [1]

Group and industry	Establishments			Employees			Average percentage change in wage rates of employees having—	
	Total number reporting	Number reporting—		Total number covered	Number having—			
		Increases	Decreases [2]		Increases	Decreases [2]	Increases	Decreases [2]
All manufacturing	33,257	453		6,387,101	193,296		4.9	
Iron and steel group	2,540	54		936,639	15,724		6.0	
Cast-iron pipe	71	3		18,210	833		6.3	
Hardware	157	3		48,451	3,118		5.0	
Stamped and enameled ware	218	8		37,320	579		9.6	
Steam fittings	109	5		36,681	3,449		4.6	
Stoves	243	5		34,866	1,035		7.9	
Structural and ornamental metalwork	308	5		32,342	1,505		9.0	
Wirework	156	11		30,262	2,006		5.2	
Screw-machine products	77	3		11,356	101		8.0	
Wire	41	3		15,450	690		8.1	
Machinery group	3,751	90		964,209	41,160		7.5	
Agricultural implements	106	4		62,943	906		4.6	
Electrical machinery	579	7		263,001	1,162		5.0	
Engines	65	3		63,489	12,273		11.4	
Foundries and machine shops	2,199	56		311,752	8,299		6.2	
Machine tools	188	11		78,878	9,163		6.5	
Transportation group	735	21		733,591	81,056		2.9	
Automobiles	392	13		435,446	71,674		2.2	
Cars, electric and steam railroad	75	3		36,660	2,415		7.3	
Shipbuilding	139	4		113,561	3,128		7.6	
Lumber group	2,651	97		324,251	21,761		5.1	
Furniture	724	8		101,365	1,332		8.3	
Millwork	572	9		39,774	1,532		4.3	
Sawmills	772	69		125,078	17,070		4.7	
Forest products	189	3		21,097	649		7.9	
Wood preserving	42	3		4,464	379		8.4	
Nonferrous group	1,113	20		231,495	3,711		6.7	
Aluminum	46	3		19,240	646		6.1	
Brass, bronze, and copper products	332	8		83,402	562		5.0	
Smelting and refining	50	3		30,699	2,255		6.6	
Sheet metal	127	5		5,985	226		13.2	
Stone group	1,591	11		200,907	2,534		9.2	
Brick	537	4		41,176	511		8.5	
Fabrics group	3,567	25		986,311	9,013		6.0	
Cotton goods	833	3		411,680	2,544		7.4	
Dyeing and finishing textiles	218	4		56,002	1,084		6.7	
Woolen and worsted goods	411	13		152,968	5,245		5.2	
Wearing apparel group	2,983	5		315,879	458		6.1	

[1] Figures are not given for some industries to avoid disclosure of information concerning individual establishments. They are, however, included where practicable in "all manufacturing," in "all nonmanufacturing," and in the various industry groups.

[2] No decreases reported.

TABLE 6.—*Wage-Rate Changes Reported by Manufacturing and Nonmanufacturing Establishments During Month Ending January 15, 1941*—Continued

Group and industry	Establishments			Employees			Average percentage change in wage rates of employees having—	
	Total number reporting	Number reporting—		Total number covered	Number having—			
		Increases	Decreases		Increase	Decreases	Increases	Decreases
Leather group	1,060	10		229,384	1,455		4.7	
Leather	182	7		38,454	1,232		4.9	
Food group	5,394	28		438,094	2,247		7.5	
Baking	1,038	3		78,002	171		5.1	
Beverages	632	3		37,898	272		3.8	
Canning	1,008	5		55,104	236		10.7	
Slaughtering and meat packing	324	6		119,762	221		9.6	
Food, n. e. c.	747	4		38,535	421		6.2	
Tobacco group	224	4		66,764	1,863		4.4	
Tobacco	42	3		11,924	889		5.9	
Paper and printing group	3,951	35		364,594	2,686		4.9	
Paper boxes	665	8		43,858	598		5.1	
Paper and pulp	436	8		127,637	1,096		5.8	
Printing, book and job	1,574	9		80,058	167		4.3	
Printing, newspapers	715	7		57,302	555		3.0	
Chemical group	2,223	34		325,339	5,577		6.1	
Chemicals	246	11		71,251	3,480		5.7	
Paints and varnishes	518	10		22,346	489		5.5	
Chemicals, n. e. c.	259	6		16,714	856		8.1	
Rubber group	254	7		125,316	1,979		3.9	
Rubber goods	201	7		46,278	1,979		3.9	
Miscellaneous group	1,220	12		154,328	2,072		5.2	
Manufacturing, n. e. c.	680	7		59,042	467		5.2	
All nonmanufacturing (except building construction)	86,860	55		2,809,500	924		7.2	
Wholesale trade	13,760	28		315,100	245		7.5	
Retail trade	48,360	17		926,800	238		10.0	

Recent Publications of Labor Interest

APRIL 1941

Agriculture

Gross farm income and indices of farm production and prices in the United States, 1869–1937. By Frederick Strauss and Louis H. Bean. Washington, U. S. Department of Agriculture, 1940. 153 pp., charts. (Technical bull. No. 703.)

The plantation South, 1934–1937. By William C. Holley, Ella Winston, T. J. Woofter, Jr. Washington, U. S. Work Projects Administration, 1940. xxii, 124 pp., charts, illus. (Research monograph XXII.)

Seeking an explanation of some of the causes of economic insecurity and labor displacement in plantation areas in the southeastern part of the United States, the WPA repeated, for the year 1937 and for the same 246 plantations, a survey covering the crop year 1934, which was analyzed in its report on "Landlord and tenant on the cotton plantation." The present report reviews the changes between 1934 and 1937 in plantation organization and operation, in labor and power, and in labor requirements for cotton production (to 1938); the credit situation; and plantation, operator, and tenant income. Living conditions, relief needs, and programs and policies are also considered.

From 1934 to 1937 the average size of the plantations and the proportion of cropland in cotton per plantation increased. Although there was improvement in the financial status of both tenants and landlords, cropper and share-tenant net income, including home-use production, averaged only about $400 per family. While croppers operated nearly half the acreage in both 1934 and 1937, there was a significant increase between these years in the acreage operated by wage labor at the expense of share-tenant and renter labor, and the use of mechanized power was expanded.

Rural America lights up. By Harry Slattery. Washington, D. C., National Home Library Foundation, 1940. xiv, 142 pp.

Story of the rural electrification program—conditions that led to it, legal basis for it, long struggle with the private utilities, development of cooperatives under the system, and the program from the social and defense standpoints.

They live on the land! Life in an open-country Southern community. By Paul W. Terry and Verner M. Sims. University, Ala., University of Alabama, Bureau of Educational Research, 1940. 313 pp., illus.

The study describes the economic and social life of a rural community in Alabama.

Democracy comes to a cotton kingdom: The story of Mexico's La Leguna. By Clarence Senior. México, D. F., Centro de Estudios Pedagógicos e Hispano-Americanos, 1940. 56 pp., illus.

This account of the communal system of land tenure in operation in the Leguna cotton-growing region of Mexico includes information about compensation of members for their work and on cooperative stores.

Cooperative Movement

Annals of Collective Economy, May–July 1940. Geneva, Switzerland. Pp. 193–334.

Collection of articles on various phases of the cooperative movement. These include: Cooperatives versus cartels and trusts—the experience of Sweden;

EDITOR'S NOTE: The Bureau of Labor Statistics does not distribute the publications to which reference is made in this list, except those issued by the Bureau itself. For all others, please write to the respective publishing agencies mentioned.

Educational work of the British Cooperative Union; The commandite—cooperative work in the French printing industry; The farmers' retail petroleum cooperative societies and the first cooperative oil refinery in the USA; Agricultural cooperation in the Eastern States of the USA; Education and the success of the cooperative movement in Nova Scotia and the neighboring regions; and Cost of living in the cooperative villages of Palestine.

The cooperative movement in Bengal. By J. P. Niyogi. London, Macmillan & Co., Ltd., 1940. 267 pp.

Most of this study deals with cooperative credit associations, but there are also sections on agricultural cooperative marketing and purchasing associations and on consumers' associations, as well as on various types of workers' productive and other producer cooperatives.

El cooperativismo. By Luis Thorin Casas. (In Anales de Economía y Estadística, Contraloría General, Dirección Nacional de Estadística, Bogotá, Colombia, September 25, 1940, pp. 40–48.)

Discusses the origin of the cooperative movement, its underlying theory, and classification of cooperatives, and gives a brief history and description of each class. An appendix contains some statistics of cooperatives in Colombia through December 31, 1939, a statement of national policy in regard to cooperatives, and a bibliography.

The people's year book, 1941. Manchester, England, Cooperative Wholesale Society Ltd., [1941?]. 268 pp., illus.

Contains detailed data on the various phases of the consumers' cooperative movement of Great Britain and summary material on cooperation in various other countries of the world. A considerable portion of this yearbook is given over to discussion of war matters and the effects of the war on cooperative business. There is the usual section on labor, social, and economic conditions.

Wages and hours in consumers' cooperatives in Great Britain and the United States. By Glenn W. Miller. (In Quarterly Journal of Economics, Cambridge, Mass., February 1941, pp. 294–305.)

Data on working conditions in consumers' cooperatives in the countries named, compiled from various sources.

Report of Cooperative Division, Department of Agriculture and Rural Reconstruction, Newfoundland. By Gerald Richardson. St. John's, 1940. 28 pp.

Describes the development of cooperatives in the Province of Newfoundland and shows what they have meant in improved economic conditions. The organizations include credit unions, fishermen's marketing associations, and consumers' associations.

Cost and Standards of Living

Family income and expenditure in nine cities of East Central Region, 1935–36: Volume II, Family expenditure. By A. D. H. Kaplan, Faith M. Williams, Marjorie S. Weber. Washington, U. S. Bureau of Labor Statistics, 1941. 390 pp., charts. (Bull. No. 644, Vol. II: Study of consumer purchases, Urban series.)

Family income and expenditure in selected New England cities, 1935–36: Volume II, Family expenditure. By A. D. H. Kaplan, Faith M. Williams, Ruth E. Clem. Washington, U. S. Bureau of Labor Statistics, 1941. 251 pp., charts. (Bull. No. 645, Vol. II: Study of consumer purchases, Urban series.)

Family income and expenditure in four urban communities in Pacific Northwest, 1935–36: Volume II, Family expenditure. By A. D. H. Kaplan, Faith M. Williams, Walter Durham. Washington, U. S. Bureau of Labor Statistics, 1940. 201 pp., map, charts. (Bull. No. 649, Vol. II: Study of consumer purchases, Urban series.)

Food and cotton stamp plans—a selected list of references. Compiled by Mamie I. Herb. Washington, U. S. Bureau of Agricultural Economics, November 1940. 26 pp.; mimeographed. (Economic library list No. 18.)

An article on the effect of the stamp plan on living levels was published in the November 1940 Monthly Labor Review (p. 1060) and reprinted as Bureau of Labor Statistics Serial No. R. 1210.

Report of Chief of Bureau of Home Economics, 1940. Washington, U. S. Department of Agriculture, 1940. 21 pp.

The report gives brief outlines of studies carried out during the year dealing with family economics, foods and nutrition, textiles and clothing, and housing and household equipment. A list of recent publications on these subjects is included.

Economic and Social Problems

The bottlenecks of business. By Thurman W. Arnold. New York, Reynal & Hitchcock, 1940. 335 pp.

Discussion of restraints of trade in relation to prices and standards of living. The author's views of the relationship of the antitrust legislation to labor organizations is set forth in some detail.

The control of business cycles: A study of methods for achieving and maintaining prosperity. By John Philip Wernette. New York, Farrar & Rinehart, Inc., 1940. 197 pp.

Concise analysis of the problem of controlling business cycles, with tentative suggestions. The author refutes the traditional or classical theories of employment and money associated with business cycles but retains the basic assumption of private enterprise.

The pattern of competition. By Walton H. Hamilton. New York, Columbia University Press, 1940. 106 pp.

The author contrasts the complexities of the Nation's economic problems with the actual and possible remedial actions under the antitrust laws. The limitations of the existing laws, or "ramparts of restraint," are set forth in some detail. It is stated that antitrust procedure may not be best suited to handling the economic problems of certain industries and the author suggests the establishment of "an industrial court," whose members should be "as competent in the usages of business as they are learned in the law," for handling cases under the antitrust laws and for combining with antitrust procedure a different type of economic remedy, namely, governmental regulation.

Public ownership of Government. Collected papers of Edward P. Costigan. New York, Vanguard Press, 1940. xvi, 347 pp.

These papers afford a record of the outstanding views and public services of Senator Costigan, ranging from his part as champion of the coal and iron workers of Colorado in the early part of the present century to his part in the legislative drive for public-works programs, public responsibility for unemployment, the Social Security Act, the Fair Labor Standards Act, the National Labor Relations Act, and various other laws of the past decade. The papers have more than a personal or temporary interest because of their clarity in giving expression to basic conceptions commonly associated with liberalism.

Public policy: A yearbook of the Graduate School of Public Administration, Harvard University, 1940. Edited by C. J. Friedrich and Edward S. Mason. Cambridge, Mass., Harvard University Press, 1940. 391 pp.

Chapters are devoted to price policies and full employment; pricing of bituminous coal—some international comparisons; industrial markets and public policy; public policy of industrial control; and labor-market control.

The landscape of rural poverty: Corn bread and creek water. By Charles Morrow Wilson. New York, Henry Holt and Co., 1940. 309 pp., illus.

In this study the writer sought "to group, to view, and in some measure to evaluate outstanding symptoms of rural poverty and some of the more notable forces of its remedy."

Some aspects of German social policy under the national socialist regime. By P. Waelbroeck and I. Bessling. (In International Labor Review, Montreal, Canada, February 1941, pp. 127–152.)

Covers employment policy, including control of labor distribution, mobilization of labor reserves, and vocational training; organization of industrial relations; and regulation of wages and hours of labor.

Employment and Unemployment

Survey of employment and wages in Kentucky during 1939. Frankfort, Kentucky Unemployment Compensation Commission, 1940. 62 pp., charts; mimeographed. (Research report No. 23.)

Trend of employment in New York State factories from 1914 to 1939. Albany, New York State Department of Labor, 1940. 198 pp., charts. (Special bull. No. 206.)

The data are presented by industry and by industrial district. Index numbers of pay rolls and average weekly earnings are included.

Unemployment in 1941. (In American Federationist, Washington, D. C., February 1941, pp. 28, 29.)

The article includes a tabulation of American Federation of Labor estimates of unemployment by year from 1929 to 1940, inclusive, and by month for 1939 and 1940. A preliminary estimate for the year 1940 is set at 9,388,000, as compared with 10,220,000 for 1939. The figure for December 1940 is placed at 7,906,000, against 9,248,000 at the end of 1939.

The end of unemployment: A balance wheel for industry, the nation's greatest asset. By George H. Maxwell. Phoenix, Ariz., [the author], 602 North First Avenue, 1940. 134 pp.

Plan for settlement on the land for the workers of the country through flood control and reclamation of waste land.

Health and Industrial Hygiene

The prevalence of disability in the United States, with special reference to disability insurance. By I. S. Falk and B. S. Sanders. (In Social Security Bulletin, U. S. Social Security Board, Washington, January 1941, pp. 2–8; charts.)

Sick absenteeism in non-ferrous mining industry. By Andrew Fletcher. (In Mining Congress Journal, Washington, D. C., December 1940, pp. 39–41; illus.)

This paper, presented at the American Metal Mining Convention at Colorado Springs in September 1940, discusses the reduction in costs in the mining industry through safety programs which have greatly reduced time lost from accidents, and the need for better reporting on absenteeism on account of sickness in the effort to secure a similar reduction.

Fifth annual meeting of members of Air Hygiene Foundation of America, Inc., Pittsburgh, November 12 and 13, 1940. Pittsburgh, Pa., Air Hygiene Foundation of America, Inc., [1941?]. 106 pp.

In addition to the annual reports, there are papers on industrial diseases and various health problems connected with the national defense.

The control of tuberculosis: III, Management of the employee with pulmonary tuberculosis. By Ada Chree Reid. (In Journal of Industrial Hygiene and Toxicology, Baltimore, Md., January 1941, pp. 35–44.)

Third of a series of articles describing methods used by Metropolitan Life Insurance Company, at the home office in New York, for the control of tuberculosis among its employees. Through these methods the incidence of tuberculosis was reduced from 40 per 10,000 in 1930 to 10 per 10,000 in 1939. Among applicants for employment, however, the incidence of clinically significant cases was 80 per 10,000 persons in 1939, there having been no decrease in rate similar to that among the persons already in the employ of the Company. These findings, the author states, warrant the conclusion that pulmonary tuberculosis can be profitably controlled by methods which are simple and economical.

[*Pamphlets on industrial poisons, Nos. 1 to 32.*] Columbus, Ohio, Department of Health, 1940. Various paging.

These brochures on various poisons contain general information on their uses, industries and occupations in which they are hazards, industrial health aspects, and selected abstracts and selected references.

List of respiratory protective devices approved by Bureau of Mines. By H. H. Schrenk. Washington, U. S. Bureau of Mines, 1941. 11 pp., illus.; mimeographed. (Information circular 7030 R.)

Housing

Family housing and facilities, five regions. By Hazel Kyrk, Day Monroe, Maryland Y. Pennell, Edith D. Rainboth. Washington, U. S. Bureau of Home Economics, 1940. 223 pp., charts. (Consumer purchases study, Urban, village, and farm series; U. S. Department of Agriculture miscellaneous publication No. 399.)

Housing legislation in the United States. Washington, U. S. Bureau of Labor Statistics, 1941. 14 pp. (Serial No. R. 1198, reprint from October 1940 Monthly Labor Review.)

Housing and regional planning. By Herman Kobbé. New York, E. P. Dutton & Co., Inc., 1941. 233 pp., diagrams, plans, illus.

Advocates regional authority and outlines a plan for extensive housing operations, without increasing taxes, by means of good planning and public administration.

Post-war housing problems. By O. E. W. Olsen. Geneva, Geneva Research Centre, 1940. 69 pp., bibliography. (Geneva studies, Vol. XI, No. 6.)

Reviews the history of low-cost housing from 1941 to 1939 and outlines the problems that will arise after the present war.

Brownsville must have public housing. By Milton J. Goell. Brooklyn, N. Y., Brooklyn Committee for Better Housing and Brownsville Neighborhood Council, 1940. 30 pp.

Drawing upon statistical evidence, the author makes a case for public housing in this location.

Real property and low income housing surveys of Philadelphia, Pennsylvania, 1939. Philadelphia, Philadelphia Housing Authority and Work Projects Administration of Pennsylvania, 1940. 151 pp., maps, charts, illus.

First Texas conference on housing, April 12 and 13, 1940—transcript of proceedings. Austin, University of Texas, Department of Architecture, 1940. 70 pp.; mimeographed.

Industrial Accidents and Safety

Relation of age to industrial injuries. By Max D. Kossoris. Washington, U. S. Bureau of Labor Statistics, 1941. 16 pp. (Serial No. R. 1191, reprint from October 1940 Monthly Labor Review.)

Causes and prevention of accidents in construction industry, 1939. By Swen Kjaer and Max D. Kossoris. Washington, U. S. Bureau of Labor Statistics, 1941. 12 pp. (Serial No. R. 1199, reprint from October 1940 Monthly Labor Review.)

Summary and analysis of accidents on steam railways in the United States subject to Interstate Commerce Act, calendar year 1939. Washington, U. S. Interstate Commerce Commission, 1940. 122 pp., charts. (Accident bull. No. 108.)

Data on railway accidents in the United States, 1930 to 1939, based on Interstate Commerce Commission statistics, were published in the November 1940 Monthly Labor Review (p. 1171).

Are new hazards being introduced in coal mines faster than existing hazards are eliminated? By D. Harrington and W. J. Fene. Washington, U. S. Bureau of Mines, 1940. 11 pp.; mimeographed. (Information circular 7140.)

During the past 25 or 30 years, according to this report, the only real progress in preventing fatal accidents in coal mines has been made in connection with explosions and accidents due to use of explosives, and as regards explosions, "there are good reasons to fear that the lull is only temporary." While changes in mining practices have reduced accidents due to certain causes, these changes in some cases have presented new hazards. The report discusses the changes in mining methods, old and new accident hazards, and preventive measures.

Some information on quarry safety. By Frank E. Cash and W. H. Tomlinson. Washington, U. S. Bureau of Mines, 1941. 23 pp.; mimeographed. (Information circular 7144.)

Safety in handling and use of explosives. New York, Institute of Makers of Explosives, 1940. 67 pp., diagrams, illus. (Pamphlet No. 17.)

Proceedings of industrial safety conference held at Virginia Polytechnic Institute, November 8, 1940. Blacksburg, Va., Virginia Polytechnic Institute, 1941. 53 pp., illus. (Bulletin, Vol. 34, No. 4.)

Papers were presented on the industrial safety work of the Virginia Department of Industry and Labor, dust hazards in industry, protection from industrial toxic gases and vapors, and protection of the eyes in industry.

Transactions, 29th National Safety Congress, general and industrial sessions, Chicago, October 7–11, 1940. Chicago, National Safety Council, Inc., 1940. 756 pp.
The general subject sessions of the Congress included sessions on governmental safety service in industry, industrial health service, industrial nursing, occupational diseases, and various phases of safety work in industry. The various industrial sessions dealt with safety problems in different industries.

Industrial Relations

America's labor dictators. By Louis Kirshbaum. New York, Industrial Forum Publications, 1940. 158 pp.

Union policies and industrial management. By Sumner H. Slichter. Washington, Brookings Institution, 1941. 597 pp.
This book contains a thorough analysis of the policies and practices developed in the relations between trade-unions and management as a result of the recent growth in collective bargaining in the United States. The author refers to the development of these relations as the emergence of a system of industrial jurisprudence, sufficiently integrated to serve as a future guide for organized labor and management. Specifically, the book deals with such problems as apprenticeship, the control of hiring, the attitude of unions toward technological changes, basic systems of wage payment, etc., and their immediate and long-run effects on production and employment.

Seniority policies and procedures as developed through collective bargaining. By Frederic H. Harbison. Princeton, N. J., Princeton University, Industrial Relations Section, 1941. 63 pp.
Discusses the acquisition and retention of seniority rights, the application of seniority provisions, seniority and ability, administration of seniority systems, and seniority and work-sharing.

Shift operations under union agreements. By Roy M. Patterson. Washington, U. S. Bureau of Labor Statistics, 1941. 12 pp. (Serial No. R. 1196, reprint from October 1940 Monthly Labor Review.)

Annual report of Committee on Employment Relations, National Association of Manufacturers, presented at forty-fifth Congress of American Industry, New York City, December 1940. New York, National Association of Manufacturers, [1941?]. 40 pp.
The various problems in the field of industrial relations are considered with particular reference to the questions of the closed and open shop, Government action in the field of employment relations, the Federal wage-hour law, and the National Labor Relations Act, and recommendations are made regarding practical methods and procedures to improve the employer-employee relationship in American industry.

Four years of the Public Contracts Act. Washington, U. S. Bureau of Labor Statistics, 1941. 18 pp. (Serial No. R. 1192, reprint from October 1940 Monthly Labor Review.)

Strikes. By Joseph J. Senturia. Chicago, Ill., University of Chicago Press, 1940. 59 pp. Rev. ed.
Designed for schools and adult-education courses, this pamphlet discusses the reasons for strikes and the process for collective bargaining.

Labor Legislation

Labor laws, Federal, including National Labor Relations Act, Fair Labor Standards Act, explanatory commentaries, selected rules, regulations, and interpretative bulletins of general application. New York, Chicago, etc., Commerce Clearing House, Inc., 1940. 137 pp.

Federal legislation concerning railroad employees. Washington, U. S. Bureau of Labor Statistics, 1941. 9 pp. (Serial No. R. 1233, reprint from December 1940 Monthly Labor Review.)

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Reports of committees and resolutions adopted by Seventh National Conference on Labor Legislation, Washington, D. C., December 9–11, 1940. Washington, U. S. Department of Labor, Division of Labor Standards, 1941. 26 pp. (Bull. No. 45–A.)

A short account of the proceedings of this conference was published in the January 1941 Monthly Labor Review (p. 136).

Recent Latin American labor codes. By Eugene D. Owen. (In Inter-American Quarterly, Washington, D. C., January 1941, pp. 68–79.)

Brief history of the movement for codification of labor laws in Latin America, with some analysis of the eight labor codes now in effect (Guatemala, Chile, Mexico, Haiti, Venezuela, Ecuador, Bolivia, and Cuba). Information is also given on 24 labor codes which have been presented to national legislative bodies but not adopted.

Brazil 1939–40, an economic, social, and geographic survey. Rio de Janeiro, Ministry of Foreign Affairs, 1940. 383 pp. (In English.)

One chapter summarizes social and labor legislation enacted in Brazil to February 1940.

Occupations

The employment opportunities of today. A survey of the opportunities in business and the professions, and a key to the Britannica Fellowship Guidebooks. By Robert K. Burns. Chicago, Encyclopedia Britannica, Inc., 1940. 36 pp.

Occupational outlines on America's major occupations. Chicago, Science Research Associates, 1940. 400 pp.

These outlines consist of 100 separate folders dealing, respectively, with the 100 fields in which, according to the introductory statement, "three-fourths of all American workers earn their livings."

Occupational distribution of applicants for employment, April 1940. Prepared in Bureau of Employment Security, U. S. Social Security Board. Washington, U. S. Bureau of Labor Statistics, 1941. 15 pp. (Serial No. R. 1194, reprint from October 1940 Monthly Labor Review.)

Blacksmithing and harnessmaking. Indianapolis, National Youth Administration for Indiana, [1940?]. 20 pp., bibliography. (Forgotten fields series.)

The little publicity given to the employment opportunities offered by these old occupations has resulted in an actual shortage of workers in the trades described.

The citrus industry and occupations in Florida. Jacksonville, National Youth Administration for Florida, [1940?]. 182 pp., bibliography, charts, illus.; mimeographed.

Includes some data on wages.

Opportunities in farming. By Paul W. Chapman. Chicago, Science Research Associates, 1941. 48 pp., bibliography, illus. (American job series; Occupational monograph No. 18.)

Radio as a career. By J. L. Hornung. New York, Funk & Wagnalls Co., 1940. 212 pp. (Kitson careers series.)

Radio represents not only a new job activity but also a subject for research. Both of these aspects of opportunity in radio are given careful consideration in this volume.

How to get the job. By Mitchell Dreese. Chicago, Science Research Associates, 1941. 48 pp. (American job series; Occupational monograph No. 19.)

Among the subjects dealt with are the approach to the job market, planning the job campaign, and making your own job.

Old-Age Assistance

College plans for retirement income. By Rainard B. Robbins. New York Columbia University Press, 1940. 253 pp.

The study covers colleges in the United States and Canada and deals with college contributory pension plans using retirement annuity contracts of the Teachers Insurance and Annuity Association, and contributory and noncontributory plans using contracts of other life insurance companies. The second part of the volume discusses the evolution of college plans for retirement income.

Status of teacher retirement. Washington, National Education Association of the United States, Research Division, January 1941. 62 pp., diagrams. (Research bull., Vol. 19, No. 1.)

The bulletin was prepared as a result of the bill introduced in Congress in 1940 by Senator Wagner, proposing to extend to local and State employees the benefits of the old-age and survivors' section of the Federal social-security law. It shows the financial structure of State joint-contributory teacher-retirement systems, the fiscal status of the systems, statistics of membership, and the effects of possible extension of Federal social security to teachers.

Thirty-fourth annual report of Carnegie Foundation for Advancement of Teaching, 1939–40. New York, 1940. 170 pp.

The statistics show that on June 30, 1940, through grants from the Foundation, a total of 1,542 professors, officers, and widows of professors and officers, were receiving pensions or allowances from the institutions with which they had been connected. The general average amount received was $1,229.10.

Handbook of old-age and survivors' insurance statistics: Employment and wages of covered workers, 1938. Washington, U. S. Social Security Board, Bureau of Old-Age and Survivors' Insurance, 1940. XXIII, 268 pp.

This handbook presents statistical information for 1937 and 1938 regarding employment and wages covered by the old-age and survivors' insurance provisions of the Social Security Act. The statistics of earnings include only those earnings which were taxable for old-age insurance before the 1939 amendments to the Act were passed, and therefore exclude wages of persons 65 years of age and over, wages earned in excess of $3,000 in the service of any one employer in any one year, and wages in industries not covered by the old-age and survivors' insurance program.

Personnel Management

The human element in personnel management and the responsibilities of the administrator. By Lawrence A. Appley. Washington, Society for Personnel Administration, 1941. 34 pp. (Pamphlet No. 4.)

The writer points out that the basic principles of sound management and the basic philosophies of good personnel administration are identical, and states that good morale in an organization is an indication of sound human relationships.

Selection and development of foremen and workers. By Stewart M. Lowry and others. New York, American Management Association, 1940. 43 pp. (Production series No. 127.)

Subjects covered in the pamphlet include the qualities which make for a good foreman, methods of developing effective supervision, and new developments in the selection of factory workers.

Foreman compensation. By E. S. Horning. New York, National Industrial Conference Board, Inc., 1941. 16 pp. (Studies in personnel policy, No. 30.)

Based on information obtained from 52 companies, the report discusses the duties of a foreman, his status under the Fair Labor Standards Act, differentials in supervisory pay, methods of paying foremen, and present trends relating to foremen.

Recognizing long service. New York, National Industrial Conference Board, Inc., 1941. 8 pp. (Studies in personnel policy, No. 29.)

The data in the report cover the policies of 114 companies in giving recognition to employees for long service, including types of insignia or gifts awarded; methods of distinguishing periods of service; and special privileges granted, such as vacation in excess of the regular allowance and additional compensation.

Employee publications. New York, National Industrial Conference Board, Inc., 1941. 48 pp., illus. (Studies in personnel policy, No. 31.)

The study covered 203 representative establishments which issue a company publication or "house magazine." The report deals with the current methods and policies of management and editors and what they are doing to make their publications achieve their purposes.

Small Loans

The big business of making small loans. By Charles E. Noyes. Washington, Editorial Research Reports, 1013 Thirteenth Street NW., 1941. 17 pp. (Vol. 1, 1941, No. 4.)

A discussion of the revision of small-loan legislation, growth of small-loan business since 1910, cost of extending personal cash credit, and increasing competition for cash-loan business.

Consumer loans by commercial banks. By William Trufant Foster. Newton, Mass., Pollak Foundation for Economic Research, 1940. 43 pp., charts. (Pollak pamphlet No. 40.)

Shows the advantages and disadvantages of the commercial banks in the consumer-loan field, the abuses in the money-lending business, etc. A brief reading list is appended.

The small loan problem in South Carolina. By William Hays Simpson. (Study made for Women's Council for the Common Good.) Columbia, S. C., University of South Carolina, Extension Division, 1940. 59 pp.

Some of the findings of this study were used by the Committee appointed by the International Association of Governmental Labor Officials to investigate the question of wage earners and the loan shark. The latter report was reviewed in an article in the November 1940 issue of the Monthly Labor Review (p. 1051), reprinted in Bureau of Labor Statistics Serial No. R. 1209.

Wages and Hours of Labor

Entrance wage rates of common laborers, July 1940. By Willis C. Quant and Edward K. Frazier. Washington, U. S. Bureau of Labor Statistics, 1941. 24 pp. (Serial No. R. 1242, reprint from January 1941 Monthly Labor Review.)

Union wages and hours in bakery industry, June 1, 1940. By Frank S. McElroy. Washington, U. S. Bureau of Labor Statistics, 1941. 8 pp., chart. (Serial No. R. 1248, reprint from January 1941 Monthly Labor Review.)

Union wages and hours in the building trades, June 1, 1940. By Frank S. McElroy. Washington, U. S. Bureau of Labor Statistics, 1940. 30 pp., charts. (Serial No. R. 1220, reprint from November 1940 Monthly Labor Review.)

Earnings and hours in iron and steel industry, April 1938. Washington, U. S. Bureau of Labor Statistics, 1941. 51 pp. (Serial No. R. 1168, reprints from Monthly Labor Review for August, September, October 1940.)

Wages and hours in jewelry industry, February 1940. By H. E. Riley. Washington, U. S. Bureau of Labor Statistics, 1940. 17 pp. (Serial No. R. 1203, reprint from January 1941 Monthly Labor Review.)

Salaries and hours of labor in municipal fire departments, July 1, 1938: Volume VIII, Mountain Division cities. Washington, U. S. Bureau of Labor Statistics, 1940. 22 pp., chart. (Bull. No. 684, Vol. VIII.)

Salaries and hours of labor in municipal police departments, July 1, 1938: Volume VIII, Mountain Division cities. Washington, U. S. Bureau of Labor Statistics, 1941. 17 pp. (Bull. No. 685, Vol. VIII.)

Union wages and hours in printing trades, June 1, 1940. By Frank S. McElroy. Washington, U. S. Bureau of Labor Statistics, 1941. 32 pp., charts. (Serial No. R. 1236, reprint from December 1940 Monthly Labor Review.)

Union wages and hours of street-railway employees, June 1, 1940. By Frank S. McElroy. Washington, U. S. Bureau of Labor Statistics, 1941. 12 pp., chart. (Serial No. R. 1249, reprint from January 1941 Monthly Labor Review.)

Wartime Conditions and Emergency Control Measures

Defense planning—a national need. By Willard D. Arant. New York, National Economy League, 1940. 34 pp. (Defense series No. 4.)

The need for the coordination of defense efforts under a qualified planning board, if waste of both time and money are to be avoided, is stressed by the writer.

Labor speeds defense—report of progress. Washington, U. S. National Defense Advisory Commission, Labor Division, 1941. 40 pp.

Report of progress made by the National Defense Advisory Commission's labor division, since its establishment in June 1940, in connection with mobilization of manpower, training of workers, settlement of labor disputes, employment of the unemployed, and other matters.

Organized labor and management: How to make effective national unity in defense. Pittsburgh, Pa., Steel Workers Organizing Committee, [1941?]. 21 pp. (Publication No. 5.)

Industrial training: Apprentice, vocational, and industrial training in relation to National Defense Program. Pittsburgh, Pa., Steel Workers Organizing Committee, [1941?]. 18 pp. (Publication No. 4.)

Out of crisis, opportunity! Apprenticeship in a long-range defense program. Washington, U. S. Department of Labor, Division of Labor Standards, 1940. 27 pp. (Bull. No. 43.)

Selected occupations which have significance in national defense program, graded as to adequacy of labor supply and as to training-time requirements. Prepared for Army and Navy Munitions Board by Bureau of Labor Statistics, U. S. Department of Labor. Washington, 1940. 42 pp.; processed.

Prices and the war. By Saul Nelson and Aryness Joy. Washington, U. S. Bureau of Labor Statistics, 1941. 17 pp., charts. (Serial No. R. 1244, reprint from January 1941 Monthly Labor Review.)

Wartime price control and the retail trade. By Jules Backman. New York, National Retail Dry Goods Association, 1940. 48 pp., charts.

Reviews experience with price control in Canada, Great Britain, France, Germany, and the United States (during World War), and impact of the present war on prices in the United States.

British labor and the war. By Frieda Wunderlich. New York, New School for Social Research, 1941. 67 pp. (Graduate Faculty of Political and Social Science, Studies on war and peace, No. 8.)

Traces the evolution in the handling of labor problems in Great Britain since the outbreak of the war in 1939.

Labor's next step—a wartime strategy. London, Fabian Society, 1940. 20 pp. (Tract series No. 252.)

Accepting the challenge to British labor in the present war, the author calls on labor to lead the whole people.

The labor situation in Great Britain. Montreal, International Labor Office, 1941. 56 pp. (Studies and reports, series B, No. 34.)

This survey reviews labor conditions and labor control in the period from May to October 1940.

A plan for Britain. Washington, National Economic and Social Planning Association, 1941. 56 pp. (Planning pamphlet No. 3.)

Collection of short articles on Britain's war aims, written by British specialists on agriculture, health, housing, social insurance, etc.

Women in Industry

A study of wages of women and minors in restaurant occupations in Illinois. Chicago, Illinois State Department of Labor, Division of Women's and Children's Employment, [1940?]. xiii, 86 pp. (loose-leaf), charts; mimeographed.

This study of wages, hours, employment variations, and other conditions in the restaurant industry was made as a basis for the setting up of minimum-wage standards for women and minors in the industry.

The nonworking time of industrial women workers. Study by students of Hudson Shore Labor School. Washington, U. S. Women's Bureau, 1940. 10 pp. (Bull. No. 181.)

The report deals with the leisure-time activities of the 43 woman workers who comprised the entire student body of the labor school. The report shows the number of hours involved in the work program and the hours of nonworking time, also the types and extent of recreation in which they indulged.

Marital status and employment of women, with special reference to Negro women. By Oliver C. Cox. (In Sociology and Social Research, Los Angeles, November–December 1940, pp. 157–165.)

According to the author's findings, based on the Fifteenth Census, about 33.2 percent of the Negro married women were gainful workers in 1930 compared with 9.8 and 8.5 percent, respectively, of the native white and foreign-born white married women.

Should married women work? By Ruth Shallcross, for National Federation of Business and Professional Women's Clubs. New York, Public Affairs Committee, Inc., 1940. 31 pp., bibliography, charts. (Public affairs pamphlet No. 49.)

Analyzes the economic and social position of married and professional women on the basis of a study of this subject made under the auspices of the National Federation of Business and Professional Women's Clubs. Data on earnings and dependents of married woman workers, taken from the study by the Federation, are given in the December 1940 issue of the Monthly Labor Review (p. 1371).

General Reports

Annual report of Tennessee Valley Authority for fiscal year ended June 30, 1940. Washington, 1940. 414 pp., charts, illus.

Most of this report naturally deals with the power-conservation work of the Authority, but there are also sections on relations between the Authority and its employees, the employee-retirement scheme, safety record, etc., and summary data on the progress of the cooperatives supplying electric power and electrical appliances.

Annual report of Governor of Alaska, for fiscal year ended June 30, 1940. Washington, U. S. Department of the Interior, 1940. 64 pp.

In addition to data on business and industrial conditions, reports are included on education, health services, social welfare, and unemployment compensation in the Territory during the year.

Årsberetninger fra arbeidsrådet og arbeidstilsynet, 1939. Oslo, Arbeidstilsynet, 1940. 134 pp., diagrams, illus.

Annual report on activities of the Labor Council and labor inspectors in Norway in 1939, including information on legislation, measures for prevention of industrial accidents and diseases, wages, and working hours.

Statistica industriei extractive [*Rumania*], *1938.* Bucharest, Ministerul Economie Naţionale, Institutul Central de Statistică, 1940. 102 pp., charts.

This statistical report for the Rumanian extractive industry for 1938 includes data on production, employment, and industrial accidents.

Workers before and after Lenin. By Manya Gordon. New York, E. P. Dutton & Co., Inc., 1941. 524 pp.

The volume deals with the situation of workers in the former Russian empire and in the present-day Soviet Union, comparing wages, prices, food, housing, clothing, social security, freedom, etc., in these two periods of Russian history. While the working and living conditions of workers were hard in the Empire, the author claims that these conditions are still harder in the Soviet Union, in which even the semblances of freedom, such as forming their unions independently, advancing their demands, electing their representatives, conducting strikes, etc., are taken away from the workers.

Censos industrial, comercial y empresas que prestan servicios, 1936, Estado Apure [*Venezuela*]. Caracas, Ministerio de Fomento, Dirección de Estadística, 1940. 174 pp.

One of a series of reports, for individual States of Venezuela, on the national census of industrial, commercial, and service enterprises, taken in 1936. Figures are presented, for each of these groups separately, on employment of both salaried and wage-earning employees, by sex and whether nationals or aliens, and on average daily and monthly wages.

Indian labor in the [*British*] *West Indies.* (In International Labor Review, Montreal, Canada, February 1941, pp. 174–180.)

This article summarizes a more detailed official report dealing with matters affecting Indians in the colonies of Jamaica, Trinidad, and British Guiana.

Labor problems in the Pacific mandates. By John Alvin Decker. London and New York, Oxford University Press, 1940. xiii, 246 pp., bibliography.

The author describes the conditions of life and labor in the Pacific mandates created by the Versailles Treaty. Workers in these islands, both indigenous and imported, whether recruited as individuals or in gangs, indentured or simply kept under control by low wages and indebtedness, it is shown, have failed to reap the advantages of the rise in standards in working conditions which protective labor legislation has procured for workers in other areas.

U. S. GOVERNMENT PRINTING OFFICE: 1941